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Transformative Digital Economy, Responsive Regulatory Innovation and Contingent Network Effects: The Anatomy of E-Commerce Law in China

CHUANMAN YOU* AND QINGXIU BU**

Abstract

Digital economy in the past decades has witnessed an explosive growth momentum in China. Arguably, China has now become the leader in many fronts of global innovative digital economy. This paper fills the academic gap by explicating the evolution of one of the prime constituents of digital economy, the electronic commerce (E-commerce) sector, and its accompanying regulatory paradigm. It is opined that the explosive market development has instigated a new governance model in China. This model features innovative, participatory and collaborative regulatory approaches. It represents a polycentric paradigm facilitating technological, industrial and regulatory innovation. It is argued that such industrial and regulatory innovation casts profound implications not only cross-sectionally on many other digital economy industries within China, but also trans-nationally on global governance of innovation economy as evidenced in the ongoing clash between China and the US.

Keywords

Digital Economy, Electronic Commerce, Network Effects, New Governance, Co-regulation Framework, Industrial Standards, Consumer Protection, Data Privacy, Blockchain Technology, Internet Court

1. Introduction

China's digital economy has surged rapidly in recent years.¹ While average digitalization of the economy as a whole remains slightly lower than that in advanced

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¹ Longmei Zhang & Sally Chen, *China's Digital Economy: Opportunities and Risks*, IMF Working Paper No. 19/16 (17 January 2019). Alicia Garcia Herrero & Jianwei Xu, *How Big is China's Digital Economy?*, BRUEGEL Working Paper (17 May 2018). McKinsey Global Institute, *China's Digital Economy: A Leading Global Force*. (August 2017).

See also: Edward Tse & Matthias Hendrichs, *Chinese Digital Economy is Remaking the World of Commerce*, South China Morning Post (8 December 2014), available at <<https://www.scmp.com/comment/insight-opinion/article/1657403/chinese-digital-economy-remaking-world-commerce>>.

economies, digitalization is already high in many sectors,² in particular financial technology (FinTech) and electronic commerce (E-commerce).³ With the double-digit growth rate for the past decades, China is now the leader in the global E-commerce market.⁴ It is reported that almost 60% of the world's E-commerce transactions take place in China. The value of China's E-commerce transactions per year is larger than the value of the next five largest markets combined, which include the US, the UK, Germany, France and Japan.⁵

The exponential growth of E-commerce market offers significant employment opportunities, reduces transaction costs, increases access to global market, stimulates investment in innovation, promotes inclusive and sustainable development.⁶ But it has also posed legal and regulatory conundrums regarding a number of interweaved policy issues. How to address the industrial policy issue in supporting the development of local/domestic platforms while fostering a level playing field for foreign competitors? How to address privacy policy issue in allowing for efficient commercial utilization of data aggregation while maintaining personal data privacy and security? How to

² Longmei Zhang & Sally Chen, *China's Digital Economy: Opportunities and Risks*, IMF Working Paper No. 19/16 (17 January 2019).

³ For China's FinTech development, see in general: Chuanman You, *Recent Development of Fintech Regulation in China: A Focus on the New Regulatory Regime for the P2P Lending (Loan-Based Crowdfunding) Market* 13 Capital Markets Law Journal 85 (2018). The UK Foreign & Commonwealth Office, *Financial Services Special Report: China's Fintech Market* (July 2016). For other specific FinTech sectors, see also: Hui Deng (Robin) Hui Huang & Qingran Wu, *The Regulation of Initial Coin Offerings in China: Problems, Prognoses and Prospects* 19 European Business Organization Law Review 465 (2018). Robin Hui Huang, *Online P2P Lending and Regulatory Responses in China: Opportunities and Challenges* 19 European Business Organization Law Review 1 (2018). Lin Lin, *Managing the Risks of Equity Crowdfunding: Lessons from China* 17 Journal Of Corporate Law Studies 327 (2017).

⁴ For the development of E-commerce in China, see Section II below.

Also McKinsey Global Institute, *China's Digital Economy: A Leading Global Force* (August 2017).

⁵ Ziyang Fan & Joel Backaler, *Five Trends Shaping the Future of E-commerce in China*, World Economic Forum (17 Sep 2018), available at <<https://www.weforum.org/agenda/2018/09/five-trends-shaping-the-future-of-e-commerce-in-china/>>.

⁶ Heejin Kim, *Globalization and Regulatory Change: The Interplay of Laws and Technologies in E-commerce in Southeast Asia* 35 Computer Law & Security Review 1 (2019); Jane K. Winn, *Emerging Issues in Electronic Contracting, Technical Standards and Law Reform* 7 Uniform Law Review 699 (2002).

In 1999, the 2nd edition of the Global Action Plan for Electronic Commerce issued by the International Chamber of Commerce (ICC) highlighted the benefits of embracing E-commerce development by countries in all stages of development, which include:

- 1) increasing internal organisational and management efficiency;
- 2) increasing transaction efficiency and reducing transaction costs for both suppliers and buyers;
- 3) extending market reach of suppliers and increasing choice for both suppliers and consumers; and
- 4) providing accurate information to improve service delivery such as in health provision or the provision of information to consumers.

A Global Action Plan for Electronic Commerce, Prepared by Business with Recommendations for Governments (ICC, 2nd edition, October 1999), available at <<http://www.iccwbo.org/policy/ebitt/id2422/index.html>>.

address competition policy issue in countering platform monopolistic tendencies while allowing for maximizing the economies of scale?⁷

For a long time, Chinese policymakers have chosen to adopt subject-specific international instruments to keep up with the international practice through revising existing domestic laws and issuing supplementary legislative measures.⁸ Existing laws such as the *Contract Law*⁹ and the *Consumer's Interest Protection Law*¹⁰ have been revised to accommodate the E-commerce transactions. Newly enacted regulatory instruments such as the *Electronic Signature Law* 2005 (E-signature Law) have clarified the legal effects of electronic transaction documents including electronic bills and electronic inspection.¹¹ Various E-commerce standards have been adopted in setting industrial norms with respect to logistics management, product quality, and so on.¹²

As of 1 January 2019, the patchwork map of E-commerce regulation has been changed. Titled *E-Commerce Law of the People's Republic of China*,¹³ a new comprehensive law entered into effective. English academic literature on this topic has been scarce and focus primarily on the interaction between Information Communication Technology (ICT) networks innovation and E-commerce industry development.¹⁴

⁷ Another featuring policy issue is how to assert jurisdictional tax claims while curtailing tax planning and erosion. See in general, UN Intergovernmental Group of Experts on E-commerce and the Digital Economy, *Report of the Intergovernmental Group of Experts on E-commerce and the Digital Economy* on its Second Session (TD/B/EDE/2/4). (18-20 April 2018).

See also: OECD, *Economic and Social Impact of E-commerce: Preliminary Findings and Research Agenda* (1 January 1999).

⁸ Further discussion on China regulatory approach is under following section III&IV. See also Faye Fangfei Wang, *Law of Electronic Commercial Transactions: Contemporary Issues in the EU, US and China*, 297 – 298 (Routledge 2 ed. 2014).

⁹ For example, Articles 26&33 were integrated to the revised Contract Law 1999 to recognize the legal effects of electronic contracts and to facilitate the formation of such contracts.

The revised Contract Law 1999 updated and consolidated three pre-existing contractual regulations: the 1982 Foreign-related Economic Contract Law, the 1985 Economic Contract Law, and the 1987 Technology Contract Law. It is worth to note that the revised Contract Law 1999 has been incorporated into the Civil Code as its Part IV. The Civil Code was recently promulgated on 28th May 2020 and will take effect from 1st January 2021.

¹⁰ The *Consumer's Interest Protection Law*, promulgated in 1993, was subsequently amended in 2009 and 2013. The revision in 2013 features enhanced consumer protection in the context of E-commerce transaction. For example, the new article 24 imposes Joint and several liability on online platforms for on-platforms operators' infringement, if the online platforms: (1) cannot provide the real names, addresses, and valid contact information for the alleged infringer; or (2) does not take action to block the infringing activities that are known or should have been known to the platform provider.

¹¹ The terms of the Electronic Signatures Law of China are substantially the same as those of the UNCITRAL Model Law on Electronic Signatures. Kevin Luo, *E-Commerce Laws and Practices in China* 33 Arizona Journal of International & Comparative Law 219 (2016).

¹² For example, the Guidelines for the Standardization of Online Retailing 2017. See further discussion under the section IV.B below.

¹³ Adopted on 31 August 2018 by China's legislature, the Standing Committee of the National People's Congress. In Chinese 《中华人民共和国电子商务法》 (Zhonghua Renmin Gongheguo Dianzi Shangwu Fa). Full text is available at: <<https://www.izvoznookno.si/Dokumenti/E-commerce%20Law%20of%20the%20People's%20Republic%20of%20China.pdf>>.

¹⁴ E.g., Faye Fangfei Wang, *Law of Electronic Commercial Transactions: Contemporary Issues in the EU, US and China* (Routledge 2 ed. 2014). Kevin Luo, *E-Commerce Laws and Practices in China*

This paper fills the academic lacuna by engaging a comprehensive examination of the recently established regulatory regime within the framework of market development and global comparison.

It will be established that the new regulatory regime features a public policy choice encouraging market innovation, enhancing consumer protection and ensuring fair competition. The new regime also features a new governance model which consists of three pillars: platform based co-regulatory framework, market oriented industrial standards, and technology enabled dispute resolutions. The tentative conclusion is that this new comprehensive regime will aid in reducing the regulatory uncertainty, asymmetrical information costs, and transactional costs associated with the E-commerce innovation. In turn it will facilitate sustainable development of inclusive digital economy innovation as driven by the advancement of ICT networks.

The remaining of this paper is structured as follows. Part II succinctly reviews the phenomenal evolution of China's E-commerce market; Part III examines featuring regulatory responses which addresses three intertwined relationships among E-commerce market participants; Part IV explicates a new regulatory model set to govern the field of E-commerce market; Part V explores the network effects of China's E-commerce market and its regulation from cross-sectoral and trans-national perspectives; the last part concludes.

2. The Explosive Development

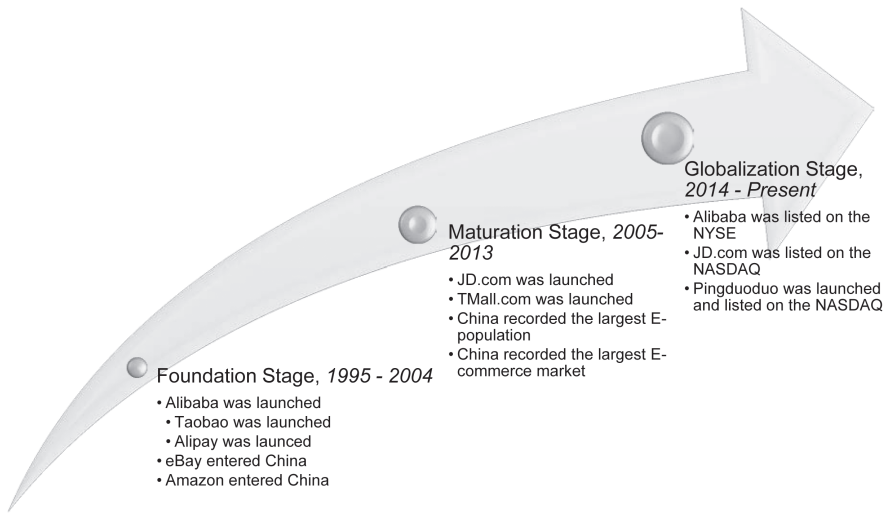
Although the precursor of the Internet appeared in the late 1960s, it was not until the development and release of the World Wide Web in the early 1990s, in particular, the introduction of the first Web browser, Mosaic, that the E-commerce emerged and started to develop.¹⁵ E-commerce emerged in China almost at the same time. The year of 1995 set the foundation of E-commerce in China with the construction of several ICT Networks infrastructures.¹⁶ The April of 1995 witnessed the first Chinese E-commerce service provider "China Yellow Pages".¹⁷ The following development of China's E-commerce can be divided into several phases according to difference

33 Arizona Journal of International & Comparative Law 219 (2016). Jane K. Winn & Yuping Song, *Can China Promote Electronic Commerce Through Law Reform? Some Preliminary Case Study Evidence*, <<https://ssrn.com/abstract=901849>> or <<http://dx.doi.org/10.2139/ssrn.901849>> (2 January 2007).

¹⁵ Arno R. Lodder & Andrew D. Murray, *Chapter 1, The European Union and E-Commerce* in Arno R. Lodder & Andrew D. Murray (eds), *EU Regulation of E-Commerce: A Commentary* (2017). See also OECD, *Economic and Social Impact of E-commerce: Preliminary Findings and Research Agenda* (1 January 1999).

¹⁶ In particular, the establishment of four major Internet projects as the infrastructure of ICT networks in China. These included the construction of China's public computer Internet (CHINANET), China Education and Research Computer Network (CERNET), China Science and Technology Network (CSTNET) and China's public Golden Bridge Internet (CHINAGBN).

¹⁷ It was launched by Jack Ma who later also founded the Alibaba group. Its business was positioned as a trade matching service for export-oriented Chinese enterprises. It established a new trade bridge for domestic and foreign enterprises.



criteria.¹⁸ This paper proposes three stages as featured by milestone industrial evolution and major policy development.

2.1. *The Foundation Stage, 1995–2004*

Since the inception of the E-commerce market in 1995, the Chinese government has attached great importance to it and actively promoted its development. In February of 1996, China's first Internet management regulations, *Interim Provisions on the Administration of the International Network of Computer Information Network*, was promulgated by the State Council. In the same month, the China International Electronic Commerce Center (CIECC) was set up by the Ministry of Commerce as a state-level all-round service organization to promote E-commerce development. Its mission was to operate as the “authoritative, stable and secured third-party service platform” to promote “international cooperation and foreign exchanges of state-level electronic commerce”.¹⁹

In June 2000, the China Electronic Commerce Association (CECA) was established by the Ministry of Industry and Information Technology as a semi indu-

¹⁸ E.g., based on the development of the main E-commerce platforms in China, it could be divided into five phases: germination, acceleration, maturation, outbreking, and transformation. The PRC Ministry of Commerce, *China E-commerce Report* (China Business Publishing House, 2015). From the perspective of industry economic theory cycle, four phases: germination, expansion, eruption and integration. Yuxin Mao & Liang Zhao, *Big Data Age – Business Ethics Frontier Issues* (Northeastern University Press, 2016). A recent report commissioned by the United Nations Industrial Development Organization suggests four stages: the initial stage, the accelerated develop stage, the standardization stage and the Globalization Stage. Hongfei Yue, *National Report on E-Commerce Development in China*, Inclusive and Sustainable Industrial Development Working Paper Series WP 17 (2017).

¹⁹ General Introduction, at <<http://ciecc.ec.com.cn/en/about/about.shtml>>.

strial self-regulatory body. This marked the recognition of E-commerce as a specific industry officially. E-commerce's development accelerated and started expansion from enterprise services to personal services. E-commerce transactions emerged as a nascent trading channel for a large number of business enterprises and individual consumers.²⁰

The prime example is the establishment of Alibaba in April 1999 by Jack Ma as a global wholesale marketplace. In October 1999, Alibaba received a USD 25 million investment from Goldman Sachs and SoftBank. In May 2003, Alibaba invested RMB 100 million to establish Taobao for domestic online retails. In October 2004, Alibaba launched Alipay as its online payment services. The other example is the foundation of JD.com: Alibaba's rival and another massive E-commerce conglomerate. In June 1999, Richard Liu established JD Multimedia, at a four-square-meter retail unit in Beijing's technology hub: Zhong Guan Cun. In 2004, the brick-and-mortar store was transferred to its E-commerce platform: jd.com, which was rebranded as 360buy.com in June 2007 and JD.com in 2013.

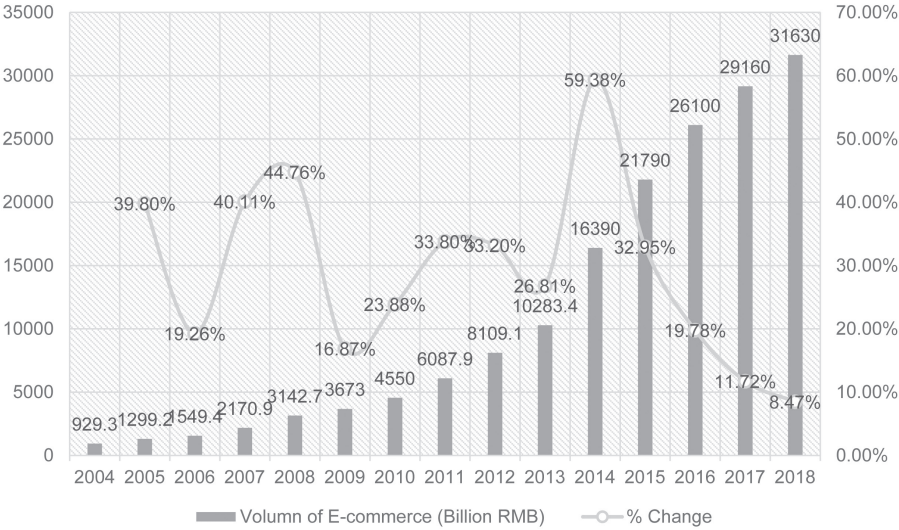
Other examples include the expansion of eBay and Amazon into China. In March 2002, the eBay entered into China's E-Commerce market by acquiring 33% stake of Each.net for USD 30 million. The Each.net was previously established in August 1999 as an online trading platform in Shanghai. In June 2003, eBay bought out the remaining shares of the Each.net for USD 150 million. Amazon entered into Chinese market by an analogous strategy. In August 2004, it acquired another Chinese E-Commerce industry leaders, Joyo.net, for USD 75 million. Joyo.net was previously launched in January of 2000 with investment from the Lenovo Group.

In this foundation phase, the E-commerce market faced constraints from lack of social, technological and institutional infrastructure. Firstly, social awareness and public confidence in the nascent online transaction business model was yet established; secondly, the ICT networks was at a low level of proliferation which contributed only a small base of Internet users and a limited scale of the E-commerce market;²¹ thirdly, the policy construction is at its early stage to cultivate a supplementary environment for the expansion of the E-commerce market.²² These insufficient infrastructure readiness is to be readdressed at the following maturation stage, which commences a golden era for China's E-commerce market featuring a double-digit growth rate. (Graph 1)

²⁰ Hongfei Yue, *National Report on E-Commerce Development in China*, Inclusive and Sustainable Industrial Development Working Paper Series WP 17 (2017).

²¹ At the end of October 1997, China had merely 199,000 Internet connected computers, 620,000 Internet users and an International Internet Gateway Bandwidth of 18.64 Mbps. By the end of 2002, the number of Internet computers had increased to 20.83 million, the number of Internet users was 59.1 million and the International Internet Gateway Bandwidth was 9380 Mbps.

²² Hongfei Yue, *National Report on E-Commerce Development in China*, Inclusive and Sustainable Industrial Development Working Paper Series WP 17 (2017).



Graph 1: Growth of E-commerce Market in China
Source: National Bureau of Statistics of China, Annual Reports of E-commerce in China (2013 – 2018)

2.2. The Maturation Stage, 2005–2013

The maturation stage of China’s E-commerce lasted from 2005 to 2013, during which the government launched a series of policy initiatives to promote E-commerce awareness, infrastructures and regulation construction. As a result, China’s market advanced to become the largest in the global E-commerce landscape in 2013.

The first policy initiative is the *Several Opinions on Accelerating the Development of E-commerce* by the State Council in January 2005. The Opinions 2005 expressly identified E-commerce as an essential part of the construction of information society and the development of the national economy. The Opinions 2005 pointed out that it was imperative to improve the institutional environment to promote E-commerce growth. Several policy proposals were put forward, which included promulgation of E-commerce law and regulation, construction of logistics and other supplementary systems, implementation of tax and other incentive financing schemes, promotion of international cooperation and so on.²³

In April 2005, the first national E-commerce related legislation, *E-Signature Law*, entered into effective.²⁴ It provided legal grounds to standardize acts of electronic

²³ E.g., Section 3&4, *Several Opinions on Accelerating the Development of E-commerce*. Full text at: <http://www.gov.cn/jzwgk/2005-08/15/content_21825.htm>.

²⁴ The terms of the Electronic Signatures Law of China are substantially the same as those of the UNCITRAL Model Law on Electronic Signatures. Kevin Luo, *E-Commerce Laws and Practices in China* 33 Arizona Journal of International & Comparative Law 219 (2016).

signature, to validate the legal effect of electronic signature, and to safeguard the interests of the parties concerned in E-commerce transactions.²⁵ In October 2005, the *Electronic Payment Guidelines* was issued by the People's Bank of China to regulate the development of electronic payments, to guard against payment risks, and to ensure the security of banks and their customers' funds. In September 2010, the People's Bank of China launched the *Administrative Measures on Payment Service of Non-financial Institutions* to regulate payment services provided by non-financial institutions. Another policy initiative is represented by the nation's Five-year Development Plans. Both the 11th and the 12th Development Plans, in 2007 and 2011 respectively, called for wider application of E-commerce to advance the efficiency and sustainability of the national economy.²⁶ These policy initiatives and regulatory instruments established a preliminary environment for developing E-commerce in China. They contributed to establishing trust and confidence in the E-commerce transactions.²⁷

In addition to the policy construction, China's E-commerce market is further boosted by the ever-growing online consumer base. Among others, the number of Internet users has grown from 111 million in 2005 to 618 million in 2013; while the number of mobile internet users has grown from null in 2005 to 500 million in 2013. (Graph 2) These figures represented an extraordinary Internet proliferation: the ratio of Internet users compared to the population has increased from 8.5% in 2005 to 45.8% in 2013. (Graph 3) In June 2008, China recorded a historic number of 298 million Internet users, which surpassed the US for the first time and became the country with the largest e-population.²⁸

With an increasing number of Internet users, as well as improved systems of online payment, logistics and other supplementary services, China's E-commerce market was booming. By the end of 2013, E-commerce transactions recorded around USD 300 billion and surpassed the US to host the largest E-commerce market in the world.²⁹ (Graph 4)

2.3. *The Globalization Stage, 2014 – present*

E-commerce, by its nature international, does not recognise borders.³⁰ The third stage of development of China's E-commerce market features the growth of cross-

²⁵ Electronic signature was defined as the data in electronic form contained in and attached to a data message to be used for identifying the identity of the signatory and for showing that the signatory recognizes what is in the message. Article 2, the E-Signature Act 2005. Full text at: <http://www.npc.gov.cn/englishnpc/Law/2007-12/05/content_1381960.htm>.

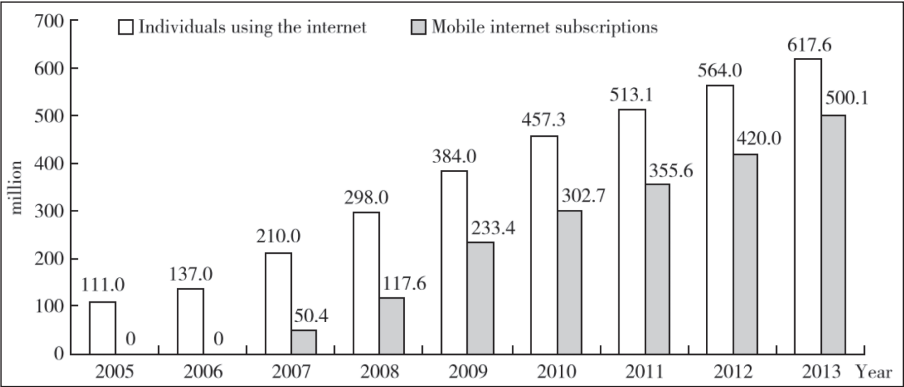
²⁶ Yu Hong, *Reading the Twelfth Five-Year Plan: China's Communication-Driven Mode of Economic Restructuring* 5 International Journal of Communication 1045 (2011).

²⁷ McKinsey Global Institute, *China's Digital Economy: A Leading Global Force* (August 2017).

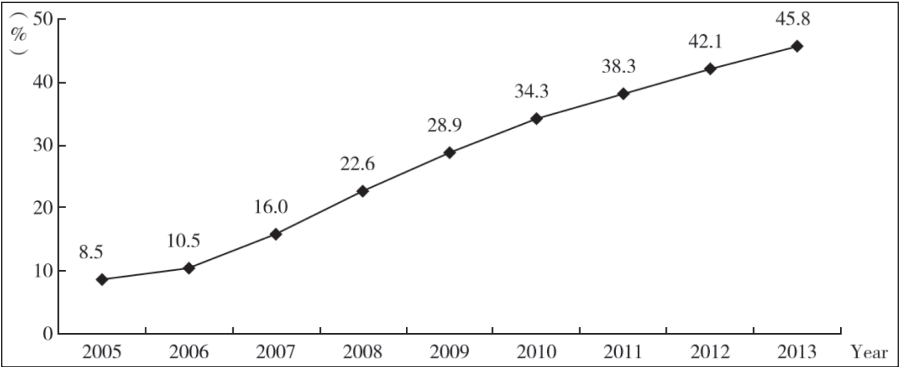
²⁸ Junyong Xiang & Linbo Jing, *Electronic Commerce in China: Current Status, Development Strategies, and New Trends* 3 China Finance and Economic Review 71 (2014).

²⁹ Jianbin Hao (郝建彬), *History of China's E-commerce Development* (中国电子商务发展史话), Ali Business Review (阿里商业评论) (6 July 2015), available at <<http://www.aliresearch.com/Blog/Article/detail/id/20528.html>>.

³⁰ Alan Davidson, *The Law of Electronic Commerce*, 4 – 5 (Cambridge University Press. 2009).



Graph 2: Number of Internet Users and Mobile Internet Users (million) (2005 – 2013)
Source: The China Internet Network Information Center (CNNIC)

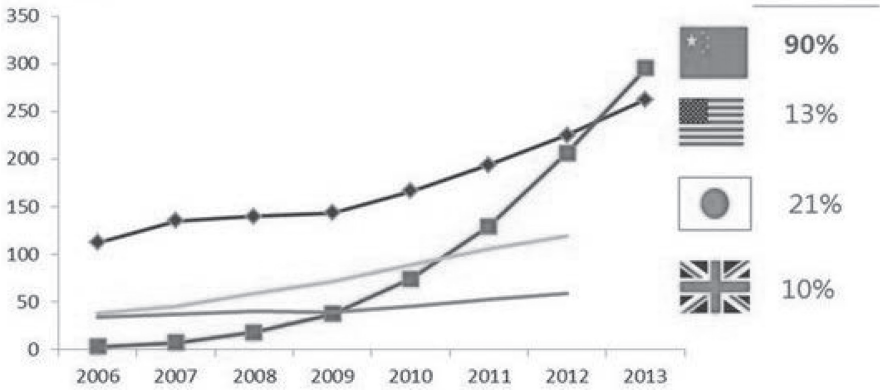


Graph 3: Internet Penetration Rate (2005 – 2013)
Source: CNNIC

border E-commerce campaigned by the Chinese governments and the globalization of China’s E-commerce industry led by giant companies. China’s E-commerce market is hence entrenched as the global leader.

The Chinese government has long been an active recipient for international law for E-commerce.³¹ From 2014 on, China appeared more proactive in the interna-

³¹ These include the 1996 UNCITRAL Model Law on Electronic Commerce, the 2001 UNCITRAL Model Law on Electronic Signatures and the 2006 UN Convention on the Use of Electronic Communications in International Contracts (Electronic Communications Convention). Kevin Luo, *E-Commerce Laws and Practices in China* 33 Arizona Journal of International & Comparative Law 219 (2016).



Graph 4: Growth of E-commerce Market in China, US, UK and Japan (USD Billion)
Source: Ali Research

tional law-making arena to promote cross-border E-commerce.³² In August 2014, The Chinese government proposed the *APEC Cross-border E-commerce Innovation and Development Initiative* (Cross-border E-commerce Initiative) to promote cross-border E-commerce cooperation and application in the Asia-Pacific region.³³ The Initiative was unanimously approved by the APEC Electronic Commerce Steering Group (ECSG) and the APEC Committee on Trade and Investment (CTI), and later endorsed by the 22nd APEC Economic Leaders' Meeting held in Beijing on 11 November 2014.³⁴

Domestically, the Chinese government also became keen in strategies accelerating cross-border E-commerce. The State Council in June 2015 issued the *Guidance on the Promotion of Cross-border E-commerce Healthy and Rapid Development*. It specified measures to tackle cross-border E-commerce related tax issues, to improve the logistics of importing and exporting through E-commerce means, and to improve cross-border E-commerce payment and settlement process.³⁵

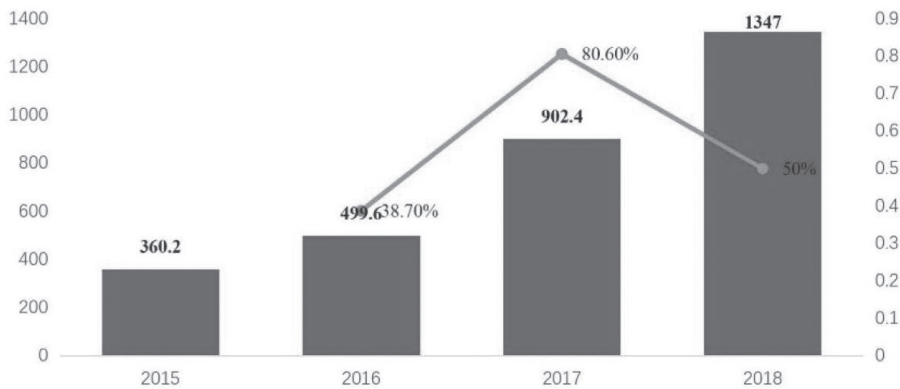
Local governments also implemented rules to promote cross-border E-commerce. The city of Guangzhou, for instance, formulated a special Refund Guarantee Fund to support cross-border E-commerce. Meanwhile, Zhejiang Province established a cross-border E-commerce collaboration mechanism, with Hangzhou and Ningbo as

³² Hongfei Yue, *National Report on E-Commerce Development in China*, Inclusive and Sustainable Industrial Development Working Paper Series WP 17 (2017).

³³ Full text available at <http://www.mofa.go.kr/www/brd/m_3905/down.do?brd_id=148&seq=352304&data_tp=A&file_seq=1>.

³⁴ Further information is available on the APEC Cross-border E-commerce Facilitation Framework: <https://www.apec.org/Meeting-Papers/Annual-Ministerial-Meetings/2017/2017_amm/Annex-A>.

³⁵ Full text available at <http://www.gov.cn/zhengce/content/2015-06/20/content_9955.htm>.



Graph 5: The Growth of Cross-border E-commerce (100 Million) (2015 – 2018)
Source: China Customs

the main pilot cities implementing global cross-border E-commerce management systems, especially for logistical and legal matters.³⁶

As a result of these policies, cross-border E-commerce became an active business model in China. For the year of 2018, China Customs’ cross-border E-commerce management platform recorded a total value of RMB 134.7 billion for retail import & export commodities, an increase of 50% from the year of 2017.³⁷ (Graph 5)

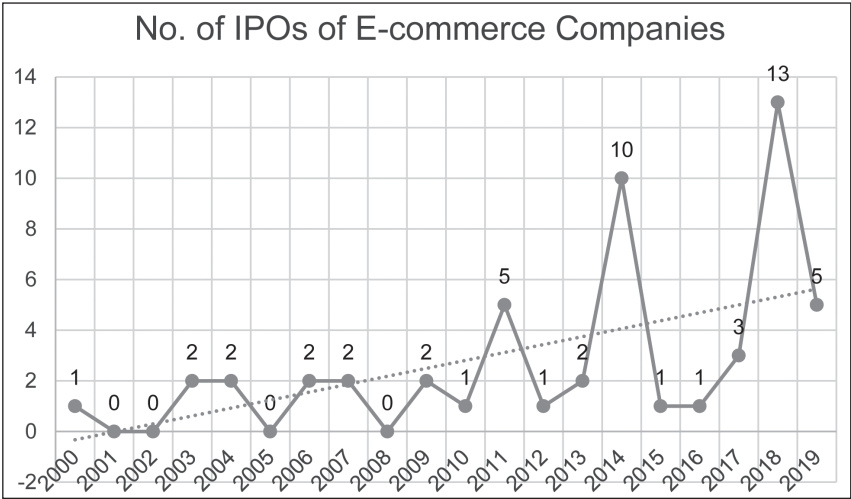
Meanwhile, a large number of E-commerce platforms entered into the global capital market. The year of 2014 marks probably one of the most historic year for the globalization of China’s E-commerce related companies. In April 2014, Jumei.com shares were floated on the New York Stock Exchange. In May, JD.com went public on NASDAQ and became the largest E-commerce platform in China only second to Alibaba. In September, Alibaba was listed on the New York Stock Exchange. At a whopping USD 25 billion, it is the largest IPO in the world’s financial history by now. As of 13 May 2019, 53 E-commerce companies have gone public with their shares floated in Stock Exchanges in New York, Hong Kong, or Shanghai. (Graph 6)³⁸

With the double-digit growth rate for the past decades, China is now the leader in the global E-commerce market. It is reported that almost 60% of the world’s E-commerce transactions take place in China. The value of China’s E-commerce transac-

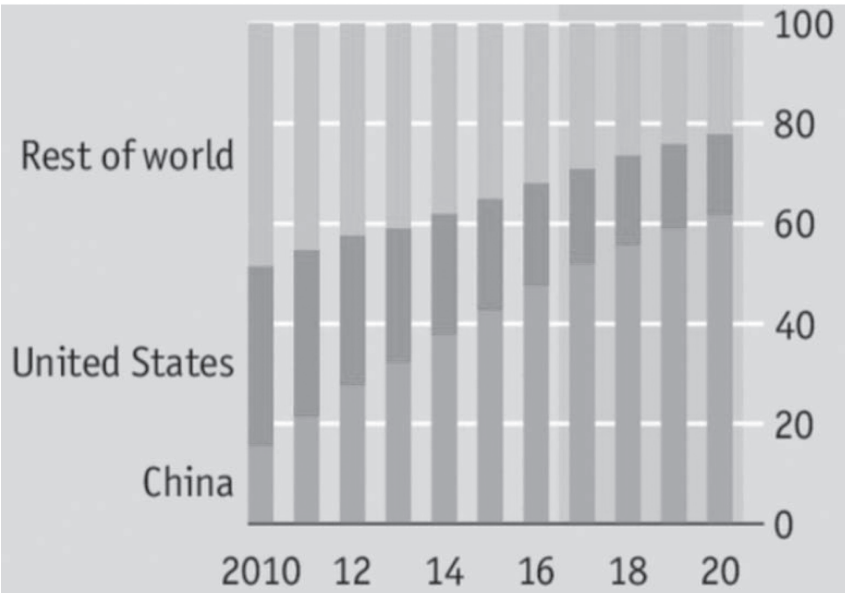
³⁶ Hongfei Yue, *National Report on E-Commerce Development in China*, Inclusive and Sustainable Industrial Development Working Paper Series WP 17 (2017).

³⁷ National Engineering Laboratory for E-Commerce Technologies, *China E-Commerce Development Index Report 2018* 《中国电子商务发展指数报告（2018）》 (28 May 2019).

³⁸ E-commerce Research Centre (WWW.100EC.CN), *China’s E-commerce Public Listed Company Data Report 2018* (《2018年度中国电商上市公司数据报告》) (13 May 2019).



Graph 6: No. of IPOs of E-Commerce Companies (2000 – 2019)
Note: Data for the year of 2019 is covered up to 5 May 2019
Source: www.100ec.cn



Graph 7: Retail E-commerce Sales, Worldwide Share of Total, %
Image: eMarketer/The Economist
Note: Ziyang Fan & Joel Backaler, *Five Trends Shaping the Future of E-commerce in China*, World Economic Forum (17 Sep 2018), available at <https://www.weforum.org/agenda/2018/09/five-trends-shaping-the-future-of-e-commerce-in-china/>.

tions per year is larger than the value of the next five largest markets combined, which include the US, the UK, Germany, France and Japan.³⁹ (Graph 7)

3. The Featured Regulatory Responses

For a long period of time, China's regulatory responses have featured light-touch characteristics with respect to E-commerce market.⁴⁰ Market players were given a free hand to advance entrepreneurship and innovation. They were relatively free to experiment business models and commercialize inventive services. For example, it took 11 years after Alibaba introduced Alipay for China's policymakers to eventually set a cap on the value of the transfers. It took another 5 years after Alipay introduced barcode-based payment solutions that Chinese regulators produced an official standard on management requirements.⁴¹

Meanwhile, limited subject-specific international laws were adopted by Chinese policymakers to keep up with international practices.⁴² For example, the E-signature Law, China's first regulation dedicated to governing E-commerce issues, was based on the UNCITRAL Model Law.⁴³ The government also revised the existing laws such as Contract Law, Advertising Law, Consumer Protection Law and other laws to respond to the nascent E-commerce market.⁴⁴ In addition, the government promoted various domestic industrial standards and participated in the setting of international E-commerce standards.⁴⁵

While having proved its worth for the promotion of the E-commerce market, these largely fragmentized regulatory framework transactions fail in two aspects. On the one hand, they dated back to a time when E-commerce was in its infancy. The drafters of these instruments possessed a limited understanding of the technologies involved. Many specific rules prove better suited to email, telex or static PDF files than to the latest generation of ICT networks such as interactive websites, social platforms or apps. On the other hand, they focused primarily on the transactional aspects of E-commerce and its underlying ICT networks infrastructure such as digital signatures

³⁹ McKinsey Global Institute, *China's Digital Economy: A Leading Global Force* (August 2017).

⁴⁰ McKinsey Global Institute, *China's Digital Economy: A Leading Global Force* (August 2017).

⁴¹ *Ibid.*

⁴² Faye Fangfei Wang, *Law of Electronic Commercial Transactions: Contemporary issues in the EU, US and China*, 297 – 298 (Routledge 2 ed. 2014).

⁴³ It, *inter alia*, encourages the use of strong authentication technology by providing that, if electronic documents are authenticated using what the law deems to be a highly reliable technology, then that authentication will be treated as the equivalent of a traditional signature without any of the uncertainty that surrounds the admissibility of electronic evidence generally under PRC law. Jane K. Winn & Yuping Song, *Can China Promote Electronic Commerce Through Law Reform? Some Preliminary Case Study Evidence*, available at <<https://ssrn.com/abstract=901849>> or <<http://dx.doi.org/10.2139/ssrn.901849>> (2 January 2007).

⁴⁴ Hongfei Yue, *National Report on E-Commerce Development in China*, Inclusive and Sustainable Industrial Development Working Paper Series WP 17 (2017).

⁴⁵ *Ibid.*

and online payment. While having contributed to establishing trust and confidence in the market, they are inadequate to address pernicious issues such as consumer and privacy protection.⁴⁶

The new E-commerce Law, effective as of 1 January 2019, constitutes of 89 provisions that are structured into seven chapters.⁴⁷ It specifies the qualifications and responsibilities of E-commerce business operators, formation and performance of E-commerce contracts, settlement of E-commerce disputes, promotion of E-commerce activities, and legal liabilities for breaching the new Law. The regulated entities under the new Law are referred to as “E-commerce business operators”. They can be natural persons, legal persons, or unincorporated organisations, who engage in E-commerce activities as elaborated below. E-commerce business operators are further divided into three categories:⁴⁸

Category	Definitions	Examples
E-commerce platform business operators	Any legal persons or unincorporated organizations that provide virtual places for digital business, transaction matching, information release, and other services to facilitate parties in an E-commerce transaction	T-mall , or JD>.com.
On-platform business operators	Third party merchants that sell goods or provides services to consumers via E-commerce platforms	Apple Store, or Huawei
Other operators	Other operators doing E-commerce business via their own websites or via other online channels, such as social media applications	Weibo, Tiktok, or WeChat

As for the geographical jurisdiction, Article 2 of the E-Commerce Law states that it applies to E-commerce activities within the territory of China. However, offshore E-commerce platform engaging cross-border E-commerce transactions may fall into its jurisdiction as a result of various connecting factors. For example, the domicile of the platform operating entity is within China; the platform has filed for the Internet Content Provider (ICP) certification; the server of the platform is located within China; the products or services are primarily for Chinese market. Even if the E-commerce Law might not directly apply to the offshore E-commerce platforms or operators, other Chinese laws and regulations may well apply concerning cross-border E-commerce s? such as import & export supervisions, cybersecurity regulation.⁴⁹

⁴⁶ McKinsey Global Institute, *China’s Digital Economy: A Leading Global Force* (August 2017).
⁴⁷ The full text and previous bills are available at: <http://www.npc.gov.cn/zgrdw/npc/lfzt/rlyw/node_31834.htm>.
⁴⁸ Article 9, the E-commerce Law.
⁴⁹ Article 26, the E-commerce Law.

The new Law regulates a wide range of E-commerce activities undertaken by market participants. It refers to E-commerce activities as business undertakings of selling commodities or providing such services via ICT networks.⁵⁰ “ICT networks” is defined to include the Internet, mobile Internet, telecommunications networks, the Internet of Things, and so on. In recent years, these ICT networks, in combining with other innovations such as big data and cloud computing, have created rich application scenarios for E-commerce and have continuously spawned new commercial models.⁵¹

The sale of commodities includes the sale of both tangible products and intangible products such as digital music, e-books and copies of computer software. The provision of services refers to the provision of services via ICT networks, such as online games, online fulfilment, online rentals, online travel, etc. Business undertakings refer to continuous commercial activities for profit purposes. Therefore, even if the basic services provided by the E-commerce operator are free, as long as they have a profit-making purpose, it should be considered as E-commerce business undertakings.

In view of the wide variety of commodities and services tradable via ICT networks, the E-Commerce Law does exclude its jurisdiction from certain special types of commodities and services. The new Law does not regulate activities engaging financial products and services, information dissemination (such as providing news information services), broadcasting and online publishing of audio and video programs, and other content services subject to digital censorship.⁵² They are subject to other laws and regulations.

It is vital to establish a coherent, predictable and compressive regulatory regime. In the following sections, we examine the featuring scope of the new E-commerce Law and its embedded regulatory responses. These regulatory responses address the intertwined relationship between the government, the consumers and business operators within the E-commerce market. The gist of such relationship is manifested in the elements, including: 1) promotion of E-commerce market, 2) prioritization of data privacy, and 3) protection of intellectual property. These elements contribute critically to a full function of the E-commerce regulatory network.

3.1. *Promoting E-commerce Development*

Conventional economic theory would suggest that governments should only subsidize basic research into information communication technologies.⁵³ The past decades shows that the Internet and many other major ICT networks innovations are the results of government-run programs or government-funded research.⁵⁴ This is also

⁵⁰ Articles 2 & 9, the E-Commerce Law.

⁵¹ Junyong Xiang & Linbo Jing, *Electronic Commerce in China: Current Status, Development Strategies, and New Trends* 3 China Finance and Economic Review 71 (2014).

⁵² Article 2, the E-Commerce Law.

⁵³ See, in general, Mariana Mazzucato, *The Entrepreneurial State: Debunking Public vs. Private Sector Myths* (Penguin. 2018).

⁵⁴ OECD, *Economic and Social Impact of E-commerce: Preliminary Findings and Research Agenda*, 23 (1 January 1999).

true of E-commerce. The infrastructures contributing to the birth of E-commerce transactions: the Internet's forerunner (ARPAnet), the World Wide Web (CERN), and the browser (government centre at the University of Illinois), were all developed with government support.⁵⁵

Government public policy choice also plays an important role in the industrial development. For example, on 1 July 1997, the then US President Bill Clinton d? the "Framework for Global Electronic Commerce" in the form of "Administration's Policy Document". The Framework set forth the federal government's strategy for "fostering increased business and consumer confidence in the use of electronic networks for commerce."⁵⁶ It listed five principles to guide government support for the evolution of E-commerce and makes recommendations about nine key areas where international efforts are needed to cooperate and to shape the marketplace.⁵⁷

Chinese policymakers have also attached great importance of industrial policy. It has initiated a variety of initiatives to promote China to become the heartland of the global E-commerce market.⁵⁸ The draft of the new E-commerce Law continues this industrial policy approach. At the first plenary meeting of the E-commerce law drafting group held on 27 December 2013, Zhang Ping, the vice chairman of the Standing Committee of the National People's Congress (NPC), stressed that E-commerce is an important component of the modern information economy and of great significance to accelerate the ongoing economic transformation. Lu Zushan, deputy director of the NPC Financial and Economic Committee, pointed out that comprehensive legislation is critical to encourage, standardize and promote sustainable E-commerce development.⁵⁹

This vision was codified into the new Law. The new E-commerce Law dedicates a whole chapter 5 to implement this industrial policy. It calls for governments, both the central and the local, to incorporate the development of E-commerce into the national economic and social development plans, to formulate implementation rules to promote the innovation in business models, to support the integrated development of E-commerce with other digital economy sectors.⁶⁰

In addition, the new Law codifies the policy agenda in promoting cross-border E-commerce. It focuses on both the domestic system in facilitating cross-border E-commerce and international cooperation in advancing cross-border E-commerce.

⁵⁵ *Ibid.*, p23.

⁵⁶ The White House, *Executive Summary, A Framework for Global Electronic Commerce* at <<https://clintonwhitehouse4.archives.gov/WH/New/Commerce/summary.html>>.

⁵⁷ Ira C. Magaziner, Ann Grier Cutter & Len A. Costa, *The Framework for Global Electronic Commerce: A Policy Perspective* 51 *Journal of International Affairs* 527 (1998).

⁵⁸ Above section II above.

See also Hongfei Yue, *National Report on E-Commerce Development in China*, Inclusive and Sustainable Industrial Development Working Paper Series WP 17 (2017).

⁵⁹ Recited by Min Zhen (郑敏), *Series Interpretation 5: "National Promotion of E-Commerce" Has Been Written into The Law* (系列解读五: "国家促进电子商务"已写入法律) (30 January 2019), available at <http://www.mofcom.gov.cn/article/zt_dzswf/ImportNews/201901/20190102831816.shtml>.

⁶⁰ Articles 64 & 67, the E-commerce Law.

On the one hand, the government is to establish and improve the management system of logistics, customs, taxation, entry-exit inspection and quarantine, payment and settlement in line with the characteristics of cross-border E-commerce.⁶¹ On the other hand, the government shall seek international cooperation in promoting cross-border E-commerce activities by exploring the establishment of international E-commerce rules and dispute resolution mechanisms.⁶²

These policy agendas alone, however, do not guarantee a success in promoting E-commerce market. A vibrant E-commerce market depends on the existence of a robust supplementary system.⁶³ The Law requires governments of all levels to attach importance to the construction of an efficient distribution network including intelligent logistical platforms, trans-regional and cross-industry logistical platforms, express distributing stations, and many others. For example, local governments are required to reserve lands for logistical warehousing in town planning, to plan for land utilization and supply, to guide social capital to invest in the construction of storage facilities.⁶⁴

The new Law is also actively advocating the incorporation of the social credit system into the E-commerce market to support a business environment of integrity.⁶⁵ The State shall support the legally established credit evaluation institutions to carry out E-commerce credit evaluation and provide the society with E-commerce credit evaluation services.⁶⁶ E-commerce platform business operators shall establish and improve credit evaluating systems, publicize credit rating rules, and provide consumers with a channel through which they can evaluate the commodities sold or services provided on the platform.⁶⁷ If an E-commerce operator commits any illegal act as stipulated in this Law, the illegal activity shall be recorded in the perpetrator's credit file per the provisions of relevant laws and administrative regulations.⁶⁸

3.2. *Enhancing Consumer Rights*

Adequate consumer protection is regarded as critical to maintain or boost confidence in E-commerce transactions.⁶⁹ Consumers have benefited from E-commerce innovation through matching offers, lowering prices and avail more pertinent information. Yet E-commerce market manifests idiosyncrasies of the new environment such as

⁶¹ *Ibid.*, Articles 71 – 72.

⁶² *Ibid.*, Article 73. See further in the Section IV below.

⁶³ Hongfei Yue, *National Report on E-Commerce Development in China*, Inclusive and Sustainable Industrial Development Working Paper Series WP 17 (2017).

⁶⁴ *Ibid.*.

⁶⁵ Articles 3 & 70, the E-commerce Law. For a general discussion on China's credit system, see: Daithi Mac Sithigh & Mathias Siems, *The Chinese Social Credit System: A Model for Other Countries?*

82 *The Modern Law Review* 1034 (2019).

⁶⁶ Article 70, the E-commerce Law.

⁶⁷ *Ibid.*, Article 39.

⁶⁸ *Ibid.*, Article 86.

⁶⁹ OECD, *Consumer Protection in E-commerce: OECD Recommendation* (OECD Publishing, 2016).

high information density, exacerbated information asymmetry, and hypertext cognitive challenges.⁷⁰ It requires innovative regulatory efforts not only in passive information disclosure, but more importantly in actively enabling consumers to make an informed decision and protecting consumers from misleading or deceptive practices. Conventional regulatory instruments based passively on the provision of information are mostly inadequate.⁷¹ E-commerce specific instruments should ensure that information is provided in manners allowing for the characteristics of the online environment.⁷²

Several EU initiatives, for examples, have set a high benchmark in protecting E-commerce specific consumer rights. Online sellers, among other requirements, must provide detailed information about themselves, their products or services, technical steps required to conclude the online contract, technical means for identifying and correcting input errors for E-commerce consumers.⁷³ The terms and conditions governing E-commerce transactions must be easily apprehensible, accessible and reproducible. Unfair standard contract (plural or singular?) as well as false or misleading advertising, are prohibited.⁷⁴ These protective requirements seem particularly important for less experienced online consumers.⁷⁵

China's new E-commerce Law also strives to achieve effective consumer protection without compromising market innovation by focusing on sufficient information disclosure. Article 10 of the new Law requires all E-commerce business operators to complete mandatory business registration as relevant market entities. Registration may be exempted if the business operators are individual natural persons, who: 1) sell agricultural and side-line products or household handicraft products produced by themselves, or 2) use their own skills to engage in public convenience services or occasional and low-value transactions for which no license is required by the law. Where a special license is required (e.g. food or drug related), such licenses shall be obtained by the business operators. For example, if a license is a prerequisite to sell certain types of medicines offline, the same license would be also mandatory for online selling.⁷⁶

⁷⁰ Eliza Mik, *Legal and Regulatory Challenges to Facilitating E-Commerce in the ASEAN*, Available at <<https://ssrn.com/abstract=3100578>> (1 December 2017).

⁷¹ Stephen Bainbridge, *Mandatory Disclosure: A Behavioral Analysis* 68 University of Cincinnati Law Review 1023 (2000).

⁷² United Nations Guidelines for Consumer Protection, 15, 20 (2016). Eliza Mik, *Legal and Regulatory Challenges to Facilitating E-Commerce in the ASEAN*, above at n71.

⁷³ Articles 5, 10 & 11, Directive 2000/31/EC of 8 June 2000 on certain legal aspects of information society services, in particular, electronic commerce, in the Internal Market, OJ 2000 No. L 178, 17 July 2000.

⁷⁴ Article 5, Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts, OJ 1993 No. L 95/29, 21 April 1993; Article 5; Directive 2006/114/EC of 16 December 2006 concerning misleading and comparative advertising, OJ 2006 No. L 376/21, 27 December 2006.

⁷⁵ Eliza Mik, *Legal and Regulatory Challenges to Facilitating E-Commerce in the ASEAN*, above at n71.

⁷⁶ Arno R. Lodder, *Chapter 2, Directive 2000/31/EC on Certain Legal Aspects of Information Society Services, in Particular Electronic Commerce, in the Internal Market* in Arno R. Lodder &

Article 17 of the new Law stipulates that an E-commerce operator shall fully, accurately and timely disclose information about the goods or services to ensure consumers' right of information and right of choice. Information about registration, licensing and taxation shall be publicly disclosed and promptly updated at conspicuous places. The new Law designates E-commerce platforms as the market gatekeepers to ensure the compliance of information disclosure. Article 27 obliges an E-commerce platform to verify information submitted by on-platform business operators, to establish an individual profile for each operator, and to conduct regular updates. E-commerce platform failing its gatekeeper roles will face a penalty ranging from 20,000 RMB to 100,000 RMB.⁷⁷

Manipulating and misleading information has been a big issue in the E-commerce market. The new Law requires businesses operators and their agents to ensure that any advertising or marketing for commodities or services are consistent with their actual characteristics, access and usage conditions. They are prohibited from making a misrepresentation or engaging in other practices likely to be deceptive, misleading, or fraudulent.⁷⁸ The new Law also prohibits forged endorsement by hired professional agents or inauthentic customers. Endorsements used in advertising and marketing should be truthful, substantiated and reflect the opinions and the actual experience of the endorsers.⁷⁹ Any material connection between businesses and online endorsers, which might impinge on the weight or credibility that consumers give to an endorsement, should be clearly and conspicuously disclosed.

3.3. *Prioritizing Data Privacy*

Protection of data privacy is a dire issue for the E-commerce market. Consumers have benefited from E-commerce through matching offers, lowering prices and availing more pertinent information. Yet E-commerce market manifests idiosyncrasies of the new environment such as high information density, exacerbated information asymmetry, and hypertext cognitive challenges. It requires regulatory efforts to enable consumers to make informed decisions, but more importantly to protect consumer data privacy from misappropriation.⁸⁰

On the one hand, ICT networks render it easy for a third party to access, aggregate, distribute, and utilize a greater amount of personal data than ever before.⁸¹ Sophisticated new technologies, such as predictive analytics, gives online businesses unprec-

Andrew D. Murray (eds), *EU Regulation of E-Commerce: A Commentary* (2017).

⁷⁷ Article 76, the E-commerce Law.

⁷⁸ *Ibid.*, Article 40.

⁷⁹ *Ibid.*, Article 76.

⁸⁰ Eliza Mik, *Legal and Regulatory Challenges to Facilitating E-Commerce in the ASEAN*, above at n71.

⁸¹ Previous safeguards of data privacy were largely owing to the cost and inconvenience of retrieving and commercializing personal information stored in deterioratable tangible forms. OECD, *Economic and Social Impact of E-commerce: Preliminary Findings and Research Agenda*, p145 (1 January 1999). Alan Davidson, *The Law of Electronic Commerce*, 217-218 (Cambridge University Press. 2009).

edented transactional advantages.⁸² On the other hand, E-commerce market abounds in what is best described as “barter transactions” involving the exchange of personal information for the right to access online resources.⁸³

Many E-commerce businesses are built predominantly around the collection and commercial utilization of the information generated by consumers during their online activities.⁸⁴ As a consequence, those interested in relevant products and services could be directly targeted for sales promotions; meanwhile, those uninterested are still subject to monitoring and their consumption behaviour could be potentially manipulated without their awareness.⁸⁵ The so-called “personalization”, or “algorithmic price discrimination” epitomises this pernicious issue, where the consumer’s personal information is used to discover her preferences and to determine the maximum price she can be charged.⁸⁶

The EU General Data Protection Regulation 2016/679 (GDPR) serves as a regulatory example for protection of data privacy.⁸⁷ In the case of “personalization”, not only does the GDPR impose tedious disclosure requirements on the business operators, but also requires an enhanced act of consent by the consumers. Business operators must inform consumers about the identity of the controller and the purposes of the intended personal data processing. The consent requires a clear affirmative act establishing a freely given, specific, informed and unambiguous indication of agreement to the processing of personal information.⁸⁸

As a principle, the new Chinese E-commerce Law mandates that E-commerce business operators shall ensure the protection of personal data privacy. Businesses operators should protect consumer privacy by ensuring that their practices relating to

⁸² Bert-Jaaps Koop, *Law, Technology and Shifting Power Relations* 25 Berkeley Technology Law Journal 974 (2010).

⁸³ Jan Whittington & Chris Jay Hoofnagle, *Unpacking Privacy’s Price* 90 North Carolina Law Review 1327 (2012).

⁸⁴ Richard Warner & Robert H. Sloan, *Behavioral Advertising: From One-Sided Chicken to Informational Norms* 15 Vanderbilt Entertainment and Technology Law Journal 49 (2012).

See also: Eliza Mik, *Legal and Regulatory Challenges to Facilitating E-Commerce in the ASEAN*, above at n71.

⁸⁵ OECD, *Economic and Social Impact of E-commerce: Preliminary Findings and Research Agenda*, p145 (1 January 1999).

⁸⁶ Oren Bar-Gill, *Algorithmic Price Discrimination: When Demand Is a Function of Both Preferences and (Mis)perceptions* 86 University of Chicago Law Review 217 (2019). OECD, *Personalised Pricing in the Digital Era: Background Note by the Secretariat* (28 November 2018). Tal Z. Zarsky, *Mine Your Own Business!: Making the Case for the Implications of the Mining of Personal Information in the Forum of Public Opinion* 5 Yale Journal of Law and Technology 1 (2003).

⁸⁷ The GDPR consists of a set of provisions including Consent, Right to Object to Profiling, Data Portability, Right to be Forgotten/Erasure, One Stop Shop for Privacy Compliance, Data Protection Officers, Data Breach Notification, and Punishments. OJ L 119, 04.05.2016, <<https://eugdpr.org>>. See also Roslyn Layton, *How the GDPR Compares to Best Practices for Privacy, Accountability and Trust*, at <<https://ssrn.com/abstract=2944358>> (31 March 2017). Samuel Goldberg, Garrett Johnson & Scott Shriver, *Regulating Privacy Online: The Early Impact of the GDPR on European Web Traffic & E-Commerce Outcomes* at <<https://ssrn.com/abstract=3421731>> (17 July 2019). Eliza Mik, *Legal and Regulatory Challenges to Facilitating E-Commerce in the ASEAN*, above at n71.

⁸⁸ GDPR, Article 4 (11) definition of “consent”.

the collection and use of consumer data are lawful, transparent and fair. They should not engage in deceptive practices related to the collection and use of consumers' personal data. They should enable consumer participation and choice; and provide reasonable security safeguards.⁸⁹

The E-commerce Law designated several provisions to implement the principle. It requires E-commerce operators to clearly specify to users the procedures for accessing, correcting, and erasing user information. When an E-commerce operator receives such a request for accesses, corrections or erasures, the operator must respond promptly upon verifying the requester's identity. When a user deletes her account, the E-commerce operator must immediately erase the user's information, unless otherwise provided by laws or regulations or agreed on by the parties.⁹⁰

The new Law also addresses the "personalization", in particular, the algorithmic price discrimination based on profiling of personal data. When offering goods or services including search results according to consumer preference and consumption habits profiling, an E-commerce business operator shall offer options independent from the concerned consumer's personal profiling so as to respect and treat consumers equally.⁹¹ To avoid circumvention, Article 19 further enunciates that for any tied-up sales or services, a conspicuous reminder shall be displayed while default opt-in is not allowed.⁹² The government market authority may order a platform operator that fails to fulfil the abovementioned responsibilities to make corrections within a specified time period; failure to do so is punishable by a fine ranging from 50,000 RMB to as much as 2 million RMB.⁹³

The E-commerce Law, however, lacks detailed rules regarding collecting and utilizing users' personal data. It is stated that E-commerce operators must abide by existing Chinese laws and regulations in respect of the protection of personal data.⁹⁴ As of this date, China does not have a systematic and comprehensive legal framework to regulate privacy and personal data protection.⁹⁵ Online platforms have largely escaped penalty sanctions for users data breach. For examples, in 2016 JD.com reported a leakage of 12 gigabyte package of user data which was subsequently traded on the black market;⁹⁶ in 2014 the Shanghai-based Ctrip group, one of the leading online travel agencies in the world,⁹⁷ was hit by a leakage of consumer data including ID card and

⁸⁹ Article 5, the E-commerce Law.

⁹⁰ *Ibid.*, Article 24.

⁹¹ *Ibid.*, Article 18.

⁹² *Ibid.*, Article 77.

⁹³ *Ibid.*, Article 83.

⁹⁴ *Ibid.*, Article 23.

⁹⁵ The existing regime features a patchwork of fragmented rules that can be found under various laws, sector-specific regulations, and industrial standards, such as the Cyber Security Law (Chapter 4).

⁹⁶ Chen Mengfan & April Ma, *Hacked JD.com Customer Data Being Traded, Reports Say*, The Caixin (12 December 2016), available at <<https://www.caixinglobal.com/2016-12-12/hacked-jdcom-customer-data-being-traded-reports-say-101026149.html>>.

⁹⁷ Listed on NASDAQ since 2003, Ctrip.com occupies 60% of China's online travel industry and is the world's second-largest online travel agent after Priceline Group in terms of gross merchandise value. As of February 2019, Ctrip owns Scotland based Skyscanner, American-based Tours4fun, Indian based

credit card.⁹⁸ Neither companies received regulatory penalties. In comparison, British Airways was recently sanctioned by the UK Information Commissioner's Office with a record fine of GBP 183m for passenger data breach.⁹⁹ A clear regulatory framework imposing actionable data privacy protection obligation on platforms would have a greater positive impact to the ecosystem of the E-commerce market in China.

3.4. *Protecting Intellectual Property*

Infringement of Intellectual property (IP) rights has been endemic within the sphere of China's E-commerce market. For example, Office of the US Trade Representative (USTR) has recently placed both the largest and the third largest E-commerce platforms, taobao.com and Pinduoduo.com respectively, on its Notorious Markets List.¹⁰⁰ The new E-commerce Law demonstrates greater efforts of the government to counteract the rampant practice of IP rights infringement. As one of the general principles, all business operators are obliged to "respect and protect intellectual property rights".¹⁰¹ Articles 41 to 45 of the E-commerce Law stipulate the IP protection system for E-commerce platform operators, and other business operators shall apply general IP laws such as copyright law, trademark law and patent law.

Article 41 of the E-commerce Law enunciates that E-commerce platform operators must establish IP protection rules and publish them on their respective platforms. These rules must comply with other relevant IP laws and regulations. They must not reduce the statutory level of IP protection or set unreasonable obstacles for the exercise of IP rights by owners. They shall include information such as detailed obligations of the business operators, clear procedures of filing complaints, mechanisms for dispute resolution and legal liabilities for rule breach. The platform operators should also establish automatic information systems to receive, transmit, and process notifications from IP right owners.¹⁰²

MakeMyTrip. Eamon Barrett, *Why Ctrip, China's Largest Online Travel Agent, Will Be Celebrating Chinese New Year*, The Fortune (1 February 2019), available at <<https://fortune.com/2019/02/01/why-ctrip-chinas-largest-online-travel-agent-will-be-celebrating-chinese-new-year/>>.

⁹⁸ Zhang Ye, *Ctrip Hit by Security Loophole*, The Global Times (24 March 2014), available at <<http://www.globaltimes.cn/content/850298.shtml>>.

⁹⁹ Rory Cellan-Jones, *British Airways Faces Record £183m Fine for Data Breach*, The BBC (8 July 2019), available at <<https://www.bbc.com/news/business-48905907>>.

¹⁰⁰ The List highlights 33 online markets and 25 physical markets allegedly failing to curb the sale of counterfeit products. It is worthy to note that: "The List does not make findings of legal violations. Nor does it reflect the U.S. Government's analysis of the general IP protection and enforcement climate in the countries connected with the listed markets." Office of the US Trade Representative, *2018 Out-of-Cycle Review of Notorious Markets* (25 April 2019).

See also Chris Prentice & David Lawder, *U.S. adds another China e-commerce site to 'notorious' IP blacklist*, Reuters (25 April 2019), available at <<https://www.reuters.com/article/us-usa-trade-notorious/u-s-adds-another-chinese-e-commerce-site-to-notorious-ip-blacklist-idUSKCN1S11ZY>>.

¹⁰¹ Article 5, the E-commerce Law.

¹⁰² *Ibid.*, Article 42.

If an IP rights owner believes that an on-platform business operator has infringed her IP rights, she may notify the platform operator and request the latter take necessary preliminary measures, such as screening or deleting information about the alleged infringement, disconnecting the relevant webpages, or terminating the transaction or service. The IP owner shall be responsible for the authenticity of the notice and provide *prima facie* evidence of the infringement, including proof of identity, proof of rights and the fact of the alleged infringement.¹⁰³

To prevent IP rights owners from abusing this procedure, Article 42 of the E-commerce Law also address erroneous or malicious notifications. Where any error in a notice causes harm to on-platform businesses, the concerned IP rights owners shall assume civil liability per the Law. Where any erroneous notice is issued maliciously and causes harm to on-platform businesses afterward, they shall assume liabilities that are doubly incumbent on them.

E-commerce platform operators do not conduct substantive examination of the infringement notice, nor of the denial of infringement statement by the operators within the platform. The IP protection measures adopted are also temporary and self-governing. When the allegedly infringing business operator raises an objection or defense in the notified platform, Article 43 of the E-commerce Law urges IP rights owners to seek legal remedies in a timely manner, and to transfer disputes from the E-commerce platform to a formal way to solve them.

If E-commerce platform operators fail to promptly take the necessary preliminary measures upon receiving an infringing notice, they are jointly and severally liable for additional damages along with the perpetrators.¹⁰⁴ Whenever the platform operators know or should have known that an operator on the platform has infringed others' IP rights but fail to take the necessary preliminary measures, the platform operators are jointly and severally liable for all damages caused.¹⁰⁵ A governmental authority may demand a platform operator to fulfil the abovementioned responsibilities; failing to act according to the governmental instruction within a specified time period, a platform operator is punishable by a fine ranging from RMB 50,000 to RMB 2 million.¹⁰⁶

4. A New Governance Model

In 1997, the World Bank noted, “[F]ar-reaching developments in the global economy have us revisiting basic questions about government: what its role should be, what it can and cannot do, and how best to do it.”¹⁰⁷ One answer to these questions is often referred to as the “New Governance”.¹⁰⁸ In contrast to the conventional command-

¹⁰³ *Ibid.*, Articles 43 & 45.

¹⁰⁴ *Ibid.*, Articles 42-44.

¹⁰⁵ *Ibid.*, Article 45.

¹⁰⁶ *Ibid.*, Article 84.

¹⁰⁷ The World Bank, *World Development Report 1997: The State in a Changing World* (1997).

¹⁰⁸ De Búrca Gráinne & Joanne Scott, *Introduction: New Governance, Law and Constitutionalism* in Gráinne De Búrca & and Joanne Scott (eds), *Law and the New Governance in the EU and US* (2006).

and-control type regulation, the New Governance features a polycentric regulation with characteristics including greater reliance on non-state institutions, greater flexibility and sensitivity to context, less hierarchical in nature and less committed to uniform outcomes.¹⁰⁹ The New Governance demonstrates an increasing awareness of collaboration involving a multitude of levels of public and private institutions.¹¹⁰ It represents a paradigm shift of governance from government hierarchies to networked organizations, from mandatory rules to negotiated norms, from centralized dispute resolution to diverse alternative mechanisms.¹¹¹

The importance of a New Governance as a form of regulation is also growing for the administration of E-commerce. The E-commerce and its underlying technology innovation promise a decentralized market that needs a new regulatory paradigm for sustainable social and economic development.¹¹² The following section discusses three important elements of the New Governance model regarding the E-commerce market. They are: 1) platform based co-regulatory framework; 2) market oriented industrial standards; 3) technologies driven dispute resolutions.

4.1. Platform Based Co-Regulatory Framework

In the conventional brick-and-mortar marketing context, the primary solution to market failure was direct intervention by a government agency. Within the digital economy context, however, the existence of third-party platforms that mediate commercial transactions fundamentally alters what the market is capable of providing on its own.¹¹³ In particular, E-commerce platform operators construct online trading arenas, which enable other market entities to become on-platform sellers or consumers, to independently conduct commercial transactions, and to resolve disputes pursuant to platform codes of conducts. E-commerce platforms constitute not merely as objects to be regulated but rather as co-regulator that could play critical roles addressing market failures.¹¹⁴

¹⁰⁹ Julia Black, *Constructing and Contesting Legitimacy and Accountability in Polycentric Regulatory Regimes* 2 Regulation & Governance 137 (2008). Julia Black, *Regulatory Conversations* 29 Journal of Law and Society 163 (2002).

¹¹⁰ Jane K. Winn, *Electronic Commerce Law: Direct Regulation, Co-Regulation and Self-Regulation*, Cahiers du CRID (September 2010).

¹¹¹ Lester Salamon, *The New Governance and the Tools of Public Action: An Introduction* in Lester Salamon (ed), *The Tools of Government: A Guide to the New Governance* (2002).

¹¹² UNCTAD, *Information Economy Report 2015: Unlocking the Potential of E-commerce for Developing Countries* (2015). OECD, *Consumer Protection in E-commerce: OECD Recommendation* (OECD Publishing, 2016).

¹¹³ Mark Fenwick, Joseph A. McCahery & Erik P. M. Vermeulen, *The End of 'Corporate' Governance: Hello 'Platform' Governance* 20 European Business Organization Law Review 171 (2019). Raymond H. Brescia, *Regulating the Sharing Economy: New and Old Insights into an Oversight Regime for the Peer-to-Peer Economy* 95 Nebraska Law Review 87 (2016).

¹¹⁴ Molly Cohent & Arun Sundararaja, *Self-Regulation and Innovation in the Peer-to-Peer Sharing Economy* 82 University of Chicago Law Review Online 116 (2017).

The new E-commerce Law endorses a co-regulatory framework for China's E-commerce market. The Article 7 stipulates that the State shall establish a collaborative administration system in line with the characteristics of E-commerce transactions involving government authorities, E-commerce business operators, and other relevant market participants.¹¹⁵ The new Law has specified a series of powers and responsibilities to enable the co-regulatory functions of E-commerce platforms over issues such as information disclosure, operation neutrality.

Information is one of the key factors for effective co-regulation.¹¹⁶ The first and foremost function of the E-commerce platforms is to enhance transparency-oriented information management, to act as a market gatekeeper to assume monitoring responsibilities. Article 27 of the E-Commerce Law obliges platform operators to make good entry points, verify and register the real identity information of the entities that enter the platform to carry out E-commerce activities. E-commerce platform operators are required to submit to the relevant government authorities the aggregated information including the market entity registration, tax collection administration and other purposes may be required by law and regulation.¹¹⁷ An E-commerce platform failing this gatekeeper role will face a penalty ranging from 20,000 RMB to 100,000 RMB.¹¹⁸

The new Law also authorizes platform operators to retain E-commerce transactional data. E-commerce platform operators are requested to record and retain the information of commodities, services and transactions via online platforms, and to ensure the integrity, confidentiality and availability of such information. Such information shall be retained for at least three years from the day of completion of the transaction, unless otherwise stipulated by other law or regulation.¹¹⁹ Platform operators are obliged to enact technological measures to ensure the platform cybersecurity and protect information safety. They must establish a contingency plan against a potential security breach, take prompt remedial action in case of information leakage, and report to the relevant department swiftly.¹²⁰

The new Law further prohibits platform business operators from jeopardizing the consumer's ability to leave negative reviews, to record transactional disputes, or to file complaints with government agencies or other judicature bodies. The E-commerce Law stipulates that platform operators have the obligation to actively assist consumers in safeguarding their rights, such as providing original contracts and transaction

¹¹⁵ Article 7, the E-commerce Law.

¹¹⁶ Mark Fenwick, Joseph A. McCahery & Erik P. M. Vermeulen, *The End of 'Corporate' Governance: Hello 'Platform' Governance* 20 European Business Organization Law Review 171 (2019); Heejin Kim, *Globalization and Regulatory Change: The Interplay of Laws and Technologies in E-commerce in Southeast Asia* 35 Computer Law & Security Review 1 (2019).

¹¹⁷ Article 28, the E-commerce Law.

¹¹⁸ *Ibid.*, Article 76.

¹¹⁹ *Ibid.*, Article 31.

¹²⁰ *Ibid.*, Article 30.

records during the dispute resolution process.¹²¹ If a platform operator fails to take any necessary measures, she is jointly and severally liable with any damage incurred.¹²²

Conflict of interests is another pernicious issue for effective co-regulation. The interests of E-commerce platforms are not always aligned with other market participants and the overall social welfare.¹²³ Moreover, winner-takes-all dynamics are ubiquitous. Network effects benefit first movers and standard setters.¹²⁴ Operators of dominant E-commerce platforms have considerable market power engaging with other counterparts, sellers, consumers. They may abuse their structural advantages to set unreasonable terms and conditions in trading rules and service agreements. For instance, E-commerce platforms have been accused of engaging in “take it or leave it” practice forcing on-platform operators to cooperate exclusively with one platform. A company operating on Alibaba’s Tmall.com reports its sales plummet 10 to 20 percent after the company refused to sign an exclusive agreement with Alibaba. The company also participated in a big sale promotion with Alibaba’s arch-rival, JD.com. The company claimed the traffic to the company’s storefront on Tmall.com has decreased substantially.¹²⁵

Another recent verdict issued by the Supreme Court reveals that Alibaba and its affiliates are now in an anti-competition lawsuit with its rival, JD.com.¹²⁶ The latter has accused the former of engaging “take it or leave it” practice since 2013. Such an engagement is alleged to constitute an abuse of market dominance position. A hefty damage of RMB 1 billion and expenditures of RMB 1 million are sought after.¹²⁷ The verdict is concerned procedurally on the choice of the trial court. More information shall be expected once the substantial trial commences in future.

The new E-commerce Law attaches importance of ensuring the operational neutrality of the platforms. A series of mechanisms are stipulated to restrict platform operators from abusing their position. Articles 32 to 36 of the E-commerce Act enunciate in detail what the platform must abide by in the formulation of these rules and agreements. Platform operators shall not use service agreements and trading rules to improperly restrict the business autonomy of on-platform operators, such as prohibi-

¹²¹ *Ibid.*, Articles 61 – 62.

¹²² *Ibid.*, Article 38.

¹²³ Molly Cohent & Arun Sundararaja, *Self-Regulation and Innovation in the Peer-to-Peer Sharing Economy* 82 University of Chicago Law Review Online 116 (2017). See also Wu Tim, *The Curse of Bigness: Antitrust in the New Gilded Age* (Columbia Global Reports, 2018); Lina M. Khan, *Amazon’s Antitrust Paradox* 126 Yale Law Journal 710 (2016).

¹²⁴ UN Intergovernmental Group of Experts on E-commerce and the Digital Economy, *Fostering Development Gains from E-commerce and Digital Platforms* (TD/B/EDE/2/2) (18-20 April 2018).

¹²⁵ The company reported its advertising banners being removed from prominent spots in Tmall.com sales showrooms. Its products were blocked from appearing on top search results. Alibaba denied all the allegation, with no surprise. See further: CNBC: Enterprise, *At War with Alibaba: Top Brands Fight China E-Commerce Giant* (23 April 2018), available at <<https://www.cnbc.com/2018/04/23/at-war-with-alibaba-top-brands-fight-china-e-commerce-giant.html>>.

¹²⁶ Supreme Court Verdict, [2019] No. 130 (Civil), as published on 9 October 2019. ((2019)最高民辖终130)

¹²⁷ *Ibid.*. Para [5].

ting the on-platform operators from trading on other platforms.¹²⁸ Platform operators must publicly solicit comments on proposed service agreements and trading rules at least seven days in advance. Once enacted, these rules and agreements, or links to such information, must be displayed in a conspicuous position on the platforms.¹²⁹

In short, the new E-commerce Law purports to create a co-regulatory framework between public authorities and private bodies to promote market undertakings in conforming public policy objectives. It intends to construct a collaborative governance model utilizing a broad pool of stakeholders and decision makers. The execution and effectiveness of such a governance model, however, may be compromised by the relatively weak sanctions as imposed by the E-commerce Law. A fine on a platform operator who breaches the E-commerce law is capped at RMB 2 million.¹³⁰ Deterrence effect as such may be negligible in dealing with multi trillion dollar behemoths such as Alibaba and shall be enhanced in future revision. In comparison, the anti-trust law, as evidenced by the above Supreme Court verdict, imposes a fine between 1% and 10% of the turnover from the previous year on parties abusing its market dominant position.¹³¹

4.2. *Market Oriented Industrial Standards*

The term “Standard” is polysemic. According to the International Organization for Standardization (ISO), one of the major standard developing organizations, a standard refers to: “[D]ocument, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context.”¹³²

Standard is perceived as a legitimate mechanism for coordinating private sector economic activity with national industrial policies.¹³³ Industrial standard setting dates

¹²⁸ Article 35, the E-commerce Law.

¹²⁹ *Ibid.*, Article 33.

¹³⁰ *Ibid.*, Chapter 6, *Legal Liabilities*.

¹³¹ Supreme Court Verdict, [2019] No. 130 (Civil). Para [5]. Similar rules have been observed on other digital economy platforms. For example, Google has been found imposing a number of restrictive clauses in contracts with third-party websites which prevented Google’s rivals from placing their search adverts on these websites. The European Commission fines Google €1.49 billion for breaching EU antitrust rules. See further: European Commission, *Antitrust: Commission Fines Google €1.49 Billion for Abusive Practices in Online Advertising (Press release)*, available at <https://europa.eu/rapid/press-release_IP-19-1770_en.htm>.

¹³² ISO/IEC Guide 2: 2004, Standardization and Related Activities – General Vocabulary, definition 3.2.

ISO/IEC Guide 2 was last reviewed and confirmed in 2016. It provides general terms and definitions concerning standardization and related activities. It is intended to contribute fundamentally towards mutual understanding amongst the members of ISO and IEC and the various governmental and non-governmental agencies involved in standardization at international, regional and national levels, <<https://www.iso.org/standard/39976.html>>.

¹³³ Jane K. Winn, *US and EU Regulatory Competition and Authentication Standards in Electronic Commerce* at <<https://ssrn.com/abstract=901324>> (22 May 2006).

back to the 19th century in the US, when the emergence of a national economy integrated by railroads and telegraph required the definition of national technical standards to guide industry and commerce.¹³⁴ Recent years have witnessed a proliferation of a wide variety of standards in national and international commercial transactions. Governments across the globe have endeavoured to facilitate an international wide, market driven, industry-led and consensus-based environment for standard setting.¹³⁵ For example, the EU and its member states have developed technical standards to eliminate barriers for the construction of the Internal Market.¹³⁶

The dynamic nature and nascent phase of the E-commerce market have heightened the risks associated with premature or disproportionate regulation featured by command and control mechanisms. There exist strong incentives for both the policy-makers and the market participants to promote market oriented industrial standards for the governance of the E-commerce market.¹³⁷ On the one hand, market oriented industrial standards reduce the information asymmetry problem by incorporating the better-informed market players into the reflexive standard making process; on the other hand, market oriented industrial standards increase the regulatory flexibility by adapting sector-specific experiments of innovative solutions to variegated business scenarios.¹³⁸

For a long time, China's policymakers have endeavored to promote viable industrial standards for the E-commerce market. They have considered standard setting as an integral element of government economic policy to promote the readiness of supplementary ICT networks infrastructures, the growth of domestic E-commerce and the global competitiveness of China's E-commerce market. Policy documents such as the *Standardization Law*,¹³⁹ the *State Council's Opinions on Vigorously Developing E-Commerce to Accelerate the New Front of the Economy Growth*,¹⁴⁰ the *Guidelines for the Standardization of Online Retailing*,¹⁴¹ provide institutional background, overall requirements and guidelines for the formulation of E-commerce standards. The new E-commerce Law prescribes that the State shall "strengthen the system of

¹³⁴ Jane W Kaufman and Benjamin Wright, *Law of Electronic Commerce*, Section 1.04 [4] (Wolters Kluwer 4 ed. 2019-1 SUPPLEMENT).

¹³⁵ International Chamber of Commerce, *A Global Action Plan for Electronic Commerce* (2nd Edition, 1999).

¹³⁶ Jane K. Winn, *US and EU Regulatory Competition and Authentication Standards in Electronic Commerce*, above at n134.

¹³⁷ International Chamber of Commerce, *A Global Action Plan for Electronic Commerce* (2nd Edition, 1999).

¹³⁸ Heejin Kim, *Globalization and Regulatory Change: The Interplay of Laws and Technologies in E-commerce in Southeast Asia* 35 *Computer Law & Security Review* 1 (2019). Michèle Finck, *Digital Co-regulation: Designing a Supranational Legal Framework for the Platform Economy* 43 *European Law Review* 47 (2018).

¹³⁹ Firstly adopted in 1988, recently revised in 2017 by the National People's Congress.

¹⁴⁰ Guofa (2015) No. 24.

¹⁴¹ Issued in 2017 conjointly by the Ministry of Commerce and the Standardization Administration of China

E-commerce standards”.¹⁴² It requests E-commerce industry associations to establish and develop industry standards to guide E-commerce business operation.¹⁴³

As early as in 2003, for example, the then Ministry of Science and Technology formed a strategic alliance with RosettaNet to create an advanced electronic commerce portal for Chinese businesses to engage with foreign trading partners.¹⁴⁴ The result is the publication of a national standard titled: the 2003 E-commerce based on XML (Extensible Markup Language) (GB/T 19256-2003). As of December 2018, China’s national E-commerce standards totaled 172. Among them, there are 60 general-purpose basic standards, 88 operational service standards, and 24 supervisory management standards, accounting for 35%, 51%, and 14%, respectively.¹⁴⁵

Significant efforts have been devoted to developing credit information related standards. At the national level, the results feature the 2018 *Specification on Credit Information Sharing among E-Commerce Enterprises* (SB/T 11216-2018). Effective as of 1 April 2019, this Specification stipulates the principles, contents, scopes, subjects, and protocols for sharing credit information across different platforms and third-party credit service.¹⁴⁶ Local governments such as Shenzhen Municipal Government have issued the 2018 *Credit Evaluation Criteria for E-Commerce Enterprises* (SZDB/Z 344-2018). Effective as of 30 December 2018, this Standard specifies the requirement, process, and methods to evaluate credit information of E-commerce enterprises within Shenzhen’s jurisdiction.¹⁴⁷

China’s standardization bodies have also actively engaged with international counterparts to develop standards that meet cross-border E-commerce market needs.¹⁴⁸ Among others, the Standardization Administration of China, has participated in international standardization activities by the ISO, the International Electrotechnical Commission (IEC), the Pan American Standards Commission (COPANT), and the Pacific Regional Standards Congress (PASC). One of the products is the ISO/TC 321: the *Transaction Assurance in E-commerce*. Co-sponsored by China and France, this Standard governs the field of “transaction assurance and upstream/downstream directly related processes in E-commerce”.¹⁴⁹

In summary, industrial Standards complements regulatory instruments in governing and facilitating the dynamic E-commerce innovation. Neither is sufficient on its own to meet the needs of the digital market development. Regulators and industrial

¹⁴² Article 66, the E-commerce Law.

¹⁴³ *Ibid.*, Article 8.

¹⁴⁴ RosettaNet is a standard developing organization that has produced a comprehensive set of XML standards for electronic commerce. Thor Olavsrud, RosettaNet, *PRC to Open China Affiliate*, Internetnews.com, 17 September 2003 at <<http://www.internetnews.com/dev-news/article.php/3078661>> (last accessed 22 December 2018).

¹⁴⁵ National Public Service Platform for Standards Information: <<http://www.std.gov.cn/gb>>.

¹⁴⁶ Full text available at <<http://std.samr.gov.cn/hb/search/stdHBDetailed?id=8B1827F24E7FBB19E05397BE0A0AB44A>>.

¹⁴⁷ Full text available at <<https://www.gtrust.org.cn/News/56.html>>.

¹⁴⁸ Articles 2-4, the Standardization Law.

¹⁴⁹ ISO/TC 321, Transaction Assurance in E-commerce: <<https://www.iso.org/committee/7145156.html>>.

organizations should cooperate to manage the interface between law and technical norms that preserve the effectiveness of legal institutions while harnessing the power of technological innovation for the public interest.¹⁵⁰ Challenges also exist to avoid burdening the standard setting and implementing with administrative overheads. Administrative intervention should be directed at increasing transparency and accountability in line with market practice with an open attitude.

4.3. *Technology Enabled Dispute Resolutions*

Just as ICT networks innovations are transforming commercial transactions, they are also transforming dispute resolutions.¹⁵¹ Compared to disputes arising from conventional commercial transactions, disputes over E-commerce transactions usually feature large number of cases involving small amount claims and wide geographical dispersion. According to a recent report, in the first half of 2019, 56.83% of E-commerce disputes in China involves claims less than RMB 1000; 24.33% involves claims ranging from RMB 1000-5000; merely 11.51% for claims greater than RMB 5000. (Graph 8)¹⁵²

In the face of the rapid innovation of information communication technology, dispute resolutions in China are also adapting to the nascent environment. China's policymakers have resorted to ICT enabled dispute resolutions, in particular, the Internet Courts to incorporate technologies advancement to promote the judiciary efficiency and transparency.¹⁵³ On 26 June 2017, the Central Commission of Comprehensively Deepening Reform adopted the *Planning for Establishing the Hangzhou Internet Court*. Pursuant to this Planning, the first Internet Court was launched on 18 August 2017 in the City of Hangzhou, which is dubbed the "capital of Chinese E-commerce" due to hosting Alibaba and many other technology companies. Before the launch of the Internet Court, the conventional courts in Hangzhou had experienced an explosive increase in the number of E-commerce related cases, leaping from 600 cases in 2013 to more than 10,000 in 2016.¹⁵⁴

A year later on 3 September 2018, built on the experience of the Hangzhou Internet Court, the Supreme People's Court issued the *Provisions on Several Issues Concer-*

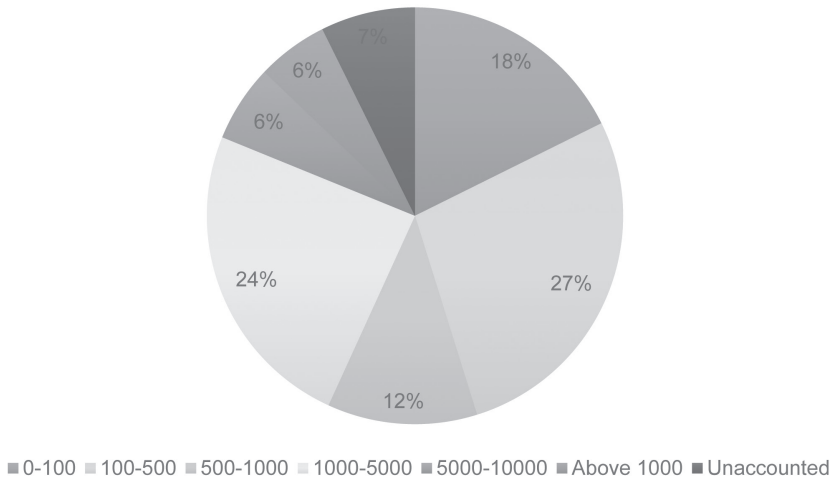
¹⁵⁰ Jane K. Winn, *Emerging Issues in Electronic Contracting, Technical Standards and Law Reform* 7 Uniform Law Review 699 (2002).

¹⁵¹ Jane W Kaufman and Benjamin Wright, *Law of Electronic Commerce*, Section 1.05 (Wolters Kluwer 4 ed. 2019-1 SUPPLEMENT). See also Douglas W. Arner, János Barberis & Ross P. Buckley, *FinTech, RegTech and the Reconceptualization of Financial Regulation* 37 Northwestern Journal of International Law & Business 371 (2017).

¹⁵² The remaining 7.34% is unaccounted. See further at: www.100ec.cn, China E-commerce User Experience and Complaint Monitoring Report (2019年(上)中国电子商务用户体验与投诉监测报告). (17 July 2019).

¹⁵³ Other alternative dispute resolution mechanisms include online arbitration and online mediation.

¹⁵⁴ Sara Xia, *China Establishes Its First Cyber-Court in Hangzhou: Thank You Alibaba*, China Law Blog(16 August 2017), available at <<https://www.chinalawblog.com/2017/08/china-establishes-its-first-cyber-court-in-hangzhou-thank-you-alibaba.html>>.



Graph 8: Value of E-commerce Related Disputes (1 January 2019–1 July 2019)

Source: www.100EC.com

ning the Trial of Cases by Internet Courts.¹⁵⁵ Six days later on 9 September 2018, two additional Internet Courts were established in Beijing and Guangzhou, respectively. According to the Provisions, these Internet Courts have the first-instance jurisdiction over following disputes derived from commercial transaction via ICT networks:¹⁵⁶

1. Disputes arising from the signing or performance of online shopping contracts through E-commerce platforms.
2. Disputes over the network service contracts which are both signed and performed on the Internet.
3. Disputes over the financial loan contracts or small loan contracts which are both signed and performed on the Internet.
4. Disputes over the ownership of the copyrights or neighboring rights of the works published on the Internet for the first time.
5. Disputes arising from infringements upon the copyrights or neighboring rights of the works published or disseminated online through the Internet.
6. Disputes over Internet domain name ownership, infringements and contracts.
7. Disputes arising from infringements upon others' personal rights, property rights and other civil rights and interests on the Internet.
8. Product liability disputes arising from the infringements upon others' personal and property rights and interests by the products purchased through E-commerce platforms due to product defects.

¹⁵⁵ Full text in Chinese: <<http://www.court.gov.cn/zixun-xiangqing-116981.html>>.

¹⁵⁶ Article 2, Provisions of the Supreme People's Court on Several Issues Concerning the Trial of Cases by Internet Courts.

9. Internet public interest cases filed by procuratorial organs.
10. Administrative disputes arising from the administrative actions taken by administrative organs, such as Internet information service management, Internet commodity trading, and related service management.
11. Other Internet civil and administrative cases the jurisdiction over which is designated by the people's courts at higher levels.

Compared to the traditional courts, these Internet Courts undertake the entire process of litigation with the aid of the information communication technologies including the Internet, online streaming, facial recognition, etc. Procedures including the filing of cases, service of documents, exchange of evidence, hearing of cases, and pronouncement of judgments are conducted via the specially designed multifunctional integrated online lawsuit platform.¹⁵⁷

Since their inception, these three Internet courts have greatly improved judicial efficiency and facilitated the resolution of E-commerce related disputes. Take the first one, the Hangzhou Internet Court, for example. As of 17 August 2018, one year into its operation, the Court had accepted 12,074 cases, out of which 10,391 cases had been concluded. The average duration of a case hearing via the Internet Court was 28 minutes and the average processing period from the filing of a case to the delivery of judgment was 38 days, 65% and 25% shorter than conventional courts respectively.¹⁵⁸

The Internet Courts are continuously adopting innovative information technologies into their trial practice. This is epitomized by the Beijing Internet Court's endeavor to incorporate blockchain technology to facilitate its operation. On 22 December 2018, the Beijing Internet Court launched the so-called Scale Chain, "Tianping Lian" in Chinese, to deposit, validate, transmit and process evidential materials in the format of electronic data. With 17 nodes, the Scale Chain is connected to 25 internet platforms to retrieve digital footprints.¹⁵⁹ The features of blockchain technology such as multi-party supervision, non-tampering, and easy traceability ensure the security of the uplink data, reduce the costs of verifying electronic evidence and promote the efficiency of judiciary process. As of 26 April 2019, it is reported that 41 cases had been concluded with assistance from the blockchain technology; 40 cases out of them were swiftly settled upon the discovery of compelling evidence retrieved from the Scale Chain.¹⁶⁰

¹⁵⁷ Article 1, Provisions of the Supreme People's Court on Several Issues Concerning the Trial of Cases by Internet Courts.

¹⁵⁸ Meng Yu & Guodong Du, *China Establishes Three Internet Courts to Try Internet-Related Cases Online*, The China Justice Observer (16 December 2018) at <<https://www.chinajusticeobserver.com/insights/china-establishes-three-internet-courts-to-try-internet-related-cases-online.html>>.

¹⁵⁹ Beijing Internet Court, *Whitepaper on Rule of Law of Cyberspace Governance* (29 April 2019).

¹⁶⁰ Ana Alexandre, *Chinese Internet Court Employs AI and Blockchain to Render Judgement* (26 April 2019), at <<https://finance.yahoo.com/news/chinese-internet-court-employs-ai-211500215.html>>.

See also Marie Huillet, *China's Supreme Court Rules That Blockchain Can Legally Authenticate Evidence*, Cointelegraph (07 September 2018), <<https://cointelegraph.com/news/chinas-supreme-court-rules-that-blockchain-can-legally-authenticate-evidence>>.

In brief, the expansion from one city to three indicates the success of online litigation via the Internet Court as a new type of technology enabled dispute resolution. It reflects a new governance approach with a dynamic interaction between the State, the market, and technology.¹⁶¹ The close tie between the Internet Courts and industrial institutions, nevertheless, are not without criticisms. The Hangzhou Internet Court's online lawsuit platform, for example, is technically supported by the Alibaba Group. Meanwhile, Alibaba and its subsidiaries are related to many E-commerce disputes. Unsurprisingly there rise public doubts as to the impartiality of the operation of the Hangzhou Internet Court.¹⁶² This suspected compromise of judiciary impartiality, however, might be contained with the potential regulatory competition from other two Internet Courts. It is worth undertaking further research on this topic.

5. The Network Effects

E-commerce is one of many applications of the ICT networks that create demand for new skills, new organisational structures, and new businesses models.¹⁶³ It manifests new ways of conducting commercial transactions and social interaction at national, regional and international levels.¹⁶⁴ Its rapid diffusion is not only an economic phenomenon, but also part of a broader process of social change, characterised by the globalisation of markets and the transformation towards an information society.¹⁶⁵ This generates strong network effects: on the one hand, the development of E-commerce and its regulation will impact on other ICT networks induced industries and their responding regulations; on the other hand, the network effects of China's E-commerce industry and its regulations will spill over to other nations in the international trade and commerce.¹⁶⁶

¹⁶¹ Christopher T Marsden, *Internet Co-regulation: European Law, Regulatory Governance and Legitimacy in Cyberspace*, 46 (Cambridge University Press, 2011).

¹⁶² Meng Yu & Guodong Du, *China Establishes Three Internet Courts to Try Internet-Related Cases Online*, The China Justice Observer (16 December 2018), at <<https://www.chinajusticeobserver.com/insights/china-establishes-three-internet-courts-to-try-internet-related-cases-online.html>>.

¹⁶³ OECD, *Economic and Social Impact of E-commerce: Preliminary Findings and Research Agenda*, 22 (1 January 1999).

¹⁶⁴ Information communication technologies, in particular, the Internet, have demonstrated influential impacts on social and political systems. See, e.g., Hang Wu Tang, *The Networked Electorate: The Internet and the Quiet Democratic Revolution in Malaysia and Singapore* 2 Journal of Information, Law & Technology 1 (2009).

¹⁶⁵ OECD, *Economic and Social Impact of E-commerce: Preliminary Findings and Research Agenda*, 18 (1 January 1999). See also Alicia Garcia Herrero & Jianwei Xu, *How Big is China's Digital Economy?*, BRUEGEL Working Paper (17 May 2018).

¹⁶⁶ For a general discussion on the network effects of legal systems, see, e.g., David C. Donald, *Legal System Network Effects and Global Legal Development*, The Chinese University of Hong Kong Faculty of Law Research Paper No. 2019-17, at <<https://ssrn.com/abstract=3444159>> (28 August 2019). Also: Peter S. Menell, *Economic Analysis of Network Effects and Intellectual Property* 34 Berkeley Technology Law Journal 219 (2019); Sarath Sanga, *Network Effects in Corporate Governance*, Journal of Law and Economics (forthcoming), at <<https://ssrn.com/abstract=3086245>> (27 February

5.1. *The Cross-sectional Effects*

The vast scale and rapid growth of the E-commerce market have fuelled innovations in other industrial sectors.¹⁶⁷ In particular, the early success of the E-commerce business has allowed many giant E-commerce companies with global reach to diversify their portfolios. These companies have been cultivating multi-faceted and multi-industrial digital ecosystems that cover a wide range of commercial and social advancement.¹⁶⁸

For example, Amazon started as an online bookstore in 1994. Over the years it became an online warehouse retailer offering a wide variety of products beyond books. It is now the world's largest E-commerce company with the net sales amounted to over USD 232 billion in 2018.¹⁶⁹ In recent years, Amazon became active in providing technology infrastructure services. Amazon Web Services (AWS), *inter alia*, is the world largest cloud services providers, owning nearly half of the worldwide infrastructure as a service (IaaS) market.¹⁷⁰

Meanwhile, Amazon's Chinese counterpart, the Alibaba Group, is the third largest IaaS provider in the world and the largest in Asia.¹⁷¹ Alibaba has built up an even more dynamic ecosystem embracing industrial sectors ranging from commercial transaction to financial technologies, from online payment to offline logistics. (Graph 9)¹⁷² One archetype example is Alibaba's Sesame Credit service, which addresses the fact that only about one-quarter of the Chinese population has credit scores. This digital credit rating service takes advantage of the huge amount of consumer data that are generated through the E-commerce transactions on the Alibaba platform.¹⁷³

2019). Hadar Yoana Jabotinsky & Barak Yarkoni, *The Network Effects of International Financial Regulation*, Hebrew University of Jerusalem Legal Research Paper No. 19-04, at <<https://ssrn.com/abstract=3298597>> (20 November 2018).

¹⁶⁷ Ziyang Fan & Joel Backaler, *Five Trends Shaping the Future of E-commerce in China*, World Economic Forum (17 Sep 2018), available at <<https://www.weforum.org/agenda/2018/09/five-trends-shaping-the-future-of-e-commerce-in-china/>>.

¹⁶⁸ McKinsey Global Institute, *China's Digital Economy: A Leading Global Force* (August 2017).

¹⁶⁹ The Statistics, *Annual Net Revenue of Amazon from 2004 to 2018*, available at <<https://www.statista.com/statistics/266282/annual-net-revenue-of-amazoncom/>>.

¹⁷⁰ Jeb Su, *Amazon Owns Nearly Half Of The Public-Cloud Infrastructure Market Worth Over \$32 Billion: Report*, Forbes (2 August 2019), available at <<https://www.forbes.com/sites/jeanbaptiste/2019/08/02/amazon-owns-nearly-half-of-the-public-cloud-infrastructure-market-worth-over-32-billion-report/#4177e79629e0>>.

¹⁷¹ Tom Brennan, *Alibaba Cloud World's #3 Provider: Gartner*, Alizila (9 July 2019), <<https://www.alizila.com/alibaba-cloud-worlds-3-provider-gartner/>>.

¹⁷² Alibaba Group Corporate Overview, available at <https://alibabagroup.com/assets2/pdf/Alibaba_Group_Corporate_Overview_Eng.pdf>.

¹⁷³ A social credit score is calculated based on personal information, ability to pay, credit history, social networks, and shopping behaviours. A high social-credit score is regarded by many Chinese as a personal "selling point" – 15 percent of users of the online dating site www.baihe.com, China's biggest matchmaking service, display their scores on their profiles. McKinsey Global Institute, *China's Digital Economy: A Leading Global Force* (August 2017). See also: Daithi Mac Sithigh & Mathias Siems, *The Chinese Social Credit System: A Model for Other Countries?* 82 *The Modern Law Review* 1034 (2019).



Graph 9: The Alibaba Empire
Source: Alibaba Group Corporate Overview (as of August 2015)

Another example is the Alipay and its derived Yu’e Bao. Since 2004, Alibaba has operated Alipay as its own online payment system on its E-commerce sites.¹⁷⁴ In 2013, Alibaba launched Yu’e Bao targeting on funds of Alipay users. It took only nine months for Yu’e Bao to become the fourth-largest money market fund in the world.¹⁷⁵ With RMB 1.13 trillion (USD 168 billion) in net assets at the end of 2018, Yu’e Bao is now the world’s largest money market fund.¹⁷⁶

In addition to the micro network effects of individual E-commerce firms, the E-commerce sector as a whole has also become a dynamic engine turbocharging China’s long-awaited transition from a heavy-industry, export-oriented, semi-command economy into an innovation-, consumer- and market-driven economy.¹⁷⁷ The

¹⁷⁴ Prospectus of the Alibaba Group Holding Limited, As filed with the Securities and Exchange Commission on 6 May 2014, available at <<https://www.sec.gov/Archives/edgar/data/1577552/000119312514184994/d709111dfl.htm>>.

¹⁷⁵ McKinsey Global Institute, *China’s Digital Economy: A Leading Global Force* (August 2017).

¹⁷⁶ Georgina Lee, *Technology and big data analysis drive 80-time average growth in fund size at world’s most-used money market fund platform*, South China Morning Post(27 March 2019), <<https://www.scmp.com/business/banking-finance/article/3003413/worlds-largest-money-market-fund-posts-80-times-average>>.

¹⁷⁷ Morgan Stanley Research, *China’s eCommerce Revolution* (Morgan Stanley, 13 March 2015), <<https://www.morganstanley.com/ideas/china-e-commerce-revolution>>.

booming E-commerce market induces the development of affiliated industries such as cloud computing, IT outsourcing, third-party payment, etc.¹⁷⁸

In short, E-commerce sector will continue to be a hotspot of innovation and entrepreneurship.¹⁷⁹ The collaborative application of multiple technologies such as blockchain, big data, artificial intelligence, Internet of Things and the fifth-generation cellular network (5G) will lead to more E-commerce service scenarios. This is one of primary reasons that the new E-commerce Law is codifying the policy of promoting the E-commerce development in China.¹⁸⁰

5.2. *The Trans-national Effects*

The rise of influential Chinese tech giants led by Alibaba and JD.com have shown the world that “China is already shaping the global digital landscape, and there is much more to come.”¹⁸¹ These behemoths are developing an increasingly visible global presence through mergers and acquisitions, green field investment, the export of new business models, and the proliferation of global partnerships.

In 2016, for example, Alibaba acquired the controlling stake in Lazada to support the former’s global expansion. Lazada, based in Singapore, was launched in 2012 as a pioneer of the E-commerce ecosystem in Southeast Asia. The synergy between Alibaba and Lazada has contributed the latter to become the largest e-commerce operator in Southeast Asia since August 2018.¹⁸² Meanwhile, Ant Financial, the FinTech behemoth affiliated with Alibaba, has recently acquired the UK-based money-transfer company WorldFirst in early 2019. This transaction was considered as Alibaba’s most significant Western foray since its thwarted attempt to acquire MoneyGram which was blocked by the Committee on Foreign Investment in the US. The deal is to help Alibaba to further expand its customer base, global reach and cross-border money-transfer capabilities of its Alipay mobile-payments network.¹⁸³

Such industrial prominences also generate network effects to aid China’s increasing influence on broader debates on global E-commerce governance over fron-

¹⁷⁸ Jane K. Winn & Yuping Song, *Can China Promote Electronic Commerce Through Law Reform? Some Preliminary Case Study Evidence*, at <<https://ssrn.com/abstract=901849>> (2 January 2007).

¹⁷⁹ *Ibid.*

¹⁸⁰ Chapter V, E-commerce Promotion, the E-commerce Law. See further discussion under the below section IV.B. Promotion of the E-commerce market

¹⁸¹ Jonathan Woetzel, Jeongmin Seong & Kevin Wei Wang, *How China became a Digital Leader* (McKinsey Global Institute, 6 December 2017), <<https://www.McKinsey.com/mgi/overview/in-the-news/how-china-became-a-digital-leader>>.

¹⁸² Based on average monthly website visit: <https://www.lazada.sg/about/?spm=a2o42.home.footer_top.9.654346b5OURnej>.

¹⁸³ Stella Yifan Xie & Ben Dummett, *Ant Financial to Acquire U.K.’s WorldFirst: Deal for the money-transfer company would boost its presence globally*, The Wall Street Journal (14 February 2019), <<https://www.wsj.com/articles/alibaba-affiliate-ant-acquires-u-k-s-worldfirst-11550146173>>. See also Nicholas Megaw, *China’s Ant Financial agrees to buy WorldFirst in \$700m deal: Acquisition marks group’s biggest push yet into western markets*, Financial Times (14 February 2019), <<https://www.ft.com/content/31b05cfa-303d-11e9-ba00-0251022932c8>>.

tiers issues such as digital sovereignty, or cross-border data flows.¹⁸⁴ For instance, significant progress has been achieved in bilateral international cooperation. China has been advocating the 21st Century Digital Silk Road and promoting international cooperation in the digital economy including but not limited to E-commerce, infrastructure construction and smart cities.¹⁸⁵ In 2018 alone, China signed Memorandum of Understanding (MoU) on bilateral E-commerce cooperation with 9 countries which brought the total number signatories to 18.¹⁸⁶

The Chinese government has also made great achievements in multilateral international cooperation. In February 2018, China and the World Customs Organization (WCO) co-hosted the first *Cross-border E-commerce Conference* in Beijing, which was attended by over 100 Ministers and other officers representing 125 countries and regions.¹⁸⁷ The Conference, among other agenda,¹⁸⁸ emphasized the need for an international standard, and supported the expeditious development of the Framework of Standards for Cross-border E-commerce, which was co-drafted by China Customs and the WCO. The Framework was adopted officially at the end of June 2018 by the WCO. The Framework sets out “baseline global standards” for Customs administrations wishing to develop legislative and operational frameworks for cross-border E-commerce.¹⁸⁹

In brief, its hegemony in global E-commerce landscape has rendered China increasingly active in engaging in the formation of bilateral and multilateral international agreements pertaining to the digital economy. Given its will and resources for making developmental initiatives, the Chinese state is likely to become a key architect of

¹⁸⁴ McKinsey Global Institute, *China's Digital Economy: A Leading Global Force* (August 2017).

¹⁸⁵ See in general, Chander Anupam, *The Electronic Silk Road: How the Web Binds the World Together in Commerce* (Yale University Press. 2013).

¹⁸⁶ Italy is the most recent country who signed the MOU on E-commerce with China on 23 March 2019. The other 17 countries include: Panama, Argentina, Iceland, Rwanda, United Arab Emirates, Kuwait, Russia, Kazakhstan, Austria, Hungary, Estonia, Cambodia, Australia, Brazil, Vietnam, New Zealand and Chile.

Further information is available at: <http://www.mofcom.gov.cn/article/zt_dsgjhz/index.shtml>.

¹⁸⁷ CGTN, *Global Trade: First Cross-border E-commerce Conference held in Beijing*, CGTN (9 February 2018), available at <https://news.cgtn.com/news/794d444d77454464776c6d636a4e6e62684a4856/share_p.html>.

¹⁸⁸ The Conference provided valuable suggestions and recommendations with regard to facilitation, control, safety and security, revenue collection, and measurement and analysis. It called for setting out a standardized and harmonized regulatory framework for cross-border e-commerce, establishing mechanisms for the exchange of advance electronic data with appropriate data privacy and security safeguards, enhancing connectivity to bridge the digital divide, building capacities and infrastructures, and promoting inclusivity. See further at: The World Customs Organization, *First Global Cross-Border E-Commerce Conference concludes with the Beijing Declaration*, WCO Newsroom (12 February 2018), <<http://www.wcoomd.org/en/media/newsroom/2018/february/first-global-crossborder-e-commerce-conference-concludes-with-the-beijing-declaration.aspx>>.

¹⁸⁹ Five regional workshops are already planned for 2018/2019 to promote and support the implementation of the standards on e-commerce and other relevant tools. The first such event will take place on 16 and 17 July in India for countries of the Asia/Pacific region.

See further at: WCO publishes global standards on e-commerce, available at <<http://www.wcoomd.org/en/media/newsroom/2018/july/wco-publishes-global-standards-on-e-commerce.aspx>>.

the global digital future.¹⁹⁰ In fact, it has been opined that the ongoing “trade war” initiated by the US against China can be attributed, to a great extent, to the rivalry between two countries in “establishing market dominance to setting industry standards to influencing regulation” of the digital economy and other areas.¹⁹¹

6. Conclusion

E-commerce is much more than simply an innovative means to undertake business transactions. Since its origination, E-commerce in China have witnessed an explosive growth momentum and transformed the country’s commercial ecosystem. The evolution of E-commerce market has been largely shaped by and contributed to the regulatory infrastructure construction. For a long time, China’s policy makers have provided ample policy space to allow the innovative application of information technologies and business models.

The new phase of China’s E-commerce market and underlying information communication technologies innovation calls for a comprehensive regulatory upgrade. The newly enacted E-commerce Law represents an important legislative milestone for China to construct a new governance model to regulate and to foster E-commerce development. This new governance model features proactive roles by the government; enhanced protection of consumer rights; and a careful balance of multiple stakeholders’ interests. This new governance model also features platform based co-regulatory framework; market oriented industrial standards and technology enabled dispute resolution mechanisms. This participatory and collaborative governance model may present a polycentric paradigm facilitating technological, industrial and regulatory innovation in a sustainable manner.

Law is deeply interlinked with its social environment.¹⁹² There is no one-size-fits-all regulatory approach to the digital economy against different institutional backdrops.¹⁹³ Policy development should facilitate market innovation to reach its full economic potential, while endeavouring to constraining negative externalities of various kinds. In this sense, China’s new E-commerce governance model might provide a useful indication of what can be expected in other digital economy sectors and other jurisdictions that openly embrace commercial innovations as driven by the information communication technologies.

¹⁹⁰ Hong Yu, *Networking China: The Digital Transformation of the Chinese Economy*, 12 (University of Illinois Press, 2017).

¹⁹¹ Other global powers, noticeably, the European Union, have also projected influences in shaping the global digital economy.

Alan Beattie, *Technology: how the US, EU and China compete to set industry standards*, The Financial Times (24 July 2019), <<https://www.ft.com/content/0c91b884-92bb-11e9-aea1-2b1d33ac3271>>.

¹⁹² David C. Donald, *Legal System Network Effects and Global Legal Development*, The Chinese University of Hong Kong Faculty of Law Research Paper No. 2019-17, at <<https://ssrn.com/abstract=3444159>> (28 August 2019).

¹⁹³ UN Intergovernmental Group of Experts on E-commerce and the Digital Economy, *Report of the Intergovernmental Group of Experts on E-commerce and the Digital Economy* on its Second Session (TD/B/EDE/2/4) (18-20 April 2018).